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GWMR

05/05/2009



TETRA TECH, INC.

3R426

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Albuquerque, NM 87110
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September 11, 2009

Mr. Glen von Gonten
State of New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: ConocoPhillips Company San Juan 27-5 #34-A - Groundwater Monitor Well Installation and
Baseline Groundwater Monitoring Report, Rio Arriba County, New Mexico

Dear Mr. von Gonten:

Enclosed please find one copy of the above-referenced document as compiled by Tetra Tech, Inc., for this
Rio Arriba County site.

Please do not hesitate to contact me at (505) 237-8440 if you have any questions or require additional
information.

Sincerely,

Kelly E. Blanchard
Project Manager/Geologist

Enclosures (1)

**GROUNDWATER MONITOR WELL INSTALLATION
AND BASELINE GROUNDWATER MONITORING
REPORT**

CONOCOPHILLIPS COMPANY

**SAN JUAN 27-5 #34A
PRODUCTION FACILITY
RIO ARriba COUNTY, NEW MEXICO**

OCD Order # NSL-1964-0

API # 30-039-23739

Prepared for:



Risk Management and Remediation
420 South Keeler Avenue
Bartlesville, OK 74004

Prepared by:



TETRA TECH, INC.

6121 Indian School Rd. NE, Suite 200
Albuquerque, NM 87110
Tetra Tech Project No. 114-690113

September 2009

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GROUNDWATER MONITOR WELL INSTALLATION AND BASELINE GROUNDWATER MONITORING REPORT SAN JUAN 27-5 #34A, RIO ARRIBA COUNTY, NEW MEXICO JULY 2009

I.0 INTRODUCTION

This report discusses the installation of 4 groundwater monitor wells by Tetra Tech, Inc. (Tetra Tech) in July 2009 at the ConocoPhillips Company (ConocoPhillips) San Juan 27-5 #34A site located outside of Blanco, New Mexico (Site), and presents the results of the baseline groundwater monitoring event conducted at the Site by Tetra Tech in July 2009. The Site is located in Section 30, Township 27N, Range 5W, of Rio Arriba County, New Mexico (Figure 1). A Site detail map is included as Figure 2.

I.1 Site Background

The surface owner of the Site is the Bureau of Land Management (BLM), who leases the land to ConocoPhillips. The historical timeline for the Site is detailed below, and is also presented in Table 1.

During a January 30, 2009 removal of an aboveground storage tank (AST) at the Site, hydrocarbon impacts beneath the AST were visually confirmed. ConocoPhillips Company (ConocoPhillips) contacted Envirotech Inc. of Farmington, NM (Envirotech) for spill assessment services following the discovery. Envirotech collected a total of 6 soil samples during the assessment: a 5-point composite soil sample from just beneath the AST; 4 grab soil samples from test holes advanced around the AST in order to delineate the extent of hydrocarbon impact (depth of these samples ranged from 10 to 15 feet below ground surface (bgs)); and another 5-point composite soil sample collected from "a small area...excavated to approximately 17 [feet] bgs..." (Envirotech, 2009). All soil samples collected were analyzed in the field for total petroleum hydrocarbons (TPH) using Environmental Protection Agency (EPA) method 418.1, in addition analysis of organic vapors using a photoionization detector (PID). The two composite soil samples were also sent for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021, and the composite soil sample collected at a depth of 17 feet bgs was submitted for TPH analysis using EPA Method 8015. The New Mexico Oil Conservation Division (OCD) recommended remediation action levels for the Site were determined to be 100 parts per million (ppm) organic vapor, 100 ppm TPH, 10 ppm benzene, and 50 ppm for BTEX. All soil sample results were below these action levels except for those collected from one of the test holes and from both composite samples collected at the surface beneath the AST and from the bottom of the excavation at 17 feet bgs.

On March 3, 2009, Envirotech returned to the Site to continue sampling activities. Envirotech stated that prior to their arrival, the "spill area was excavated to extents of 49' x 49' x 20' deep where groundwater was encountered..." (Envirotech, 2009). Envirotech collected a composite sample from the bottom of the excavation and from each of the 4 walls. Soil samples were collected and analyzed for TPH and organic vapors in the field, and all results were below OCD action levels for organic vapors. The concentration of

TPH found in the soil sample collected from the south wall was 2,170 ppm; all other TPH results were below OCD action levels. The excavation was continued along the south wall an additional 4 feet and another soil sample was collected for TPH analysis. TPH results were found to be below OCD action levels and the excavation was discontinued at that point. Final excavation dimensions were reported at 53 feet by 49 feet by 20 feet deep; excavation maps provided by Envirotech were not to scale (personal communication on July 13, 2009 between Tetra Tech and Wade Hack, ConocoPhillips field manager, revealed that the area of the excavation was within the current location of the waste water tank and the aboveground storage tank at the Site [Figure 2]). Groundwater was reached at 20 feet bgs and had begun to seep into the excavation. A groundwater sample was collected and was sent to an analytical laboratory for volatile organic compound (VOC) analysis using EPA Method 8260 (Envirotech, 2009). Laboratory results for benzene were found at a concentration of 95.6 micrograms per liter (ug/L); the New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standard for benzene is 10 ug/L.

On March 20, 2009, a report submitted to ConocoPhillips stated that a total of 1,900 cubic yards of soil were removed from the Site and were transported to an OCD-permitted facility on Crouch Mesa in Farmington, NM. Envirotech recommended the installation of groundwater monitor wells at the Site to determine "groundwater gradient and the extent of groundwater contamination" (Envirotech, 2009).

On April 2, 2009, Tetra Tech conducted a Site visit to determine placement of proposed groundwater monitor wells. Tetra Tech subsequently installed 4 groundwater monitor wells at the Site between July 15, 2009, and July 16, 2009. Tetra Tech conducted a baseline groundwater monitoring event at the Site on July 28, 2009.

1.2 Groundwater Monitor Well Installation

Between July 15, 2009 and July 16, 2009, EnviroDrill of Albuquerque, New Mexico (EnviroDrill) installed 4 groundwater monitor wells at the Site under the supervision of Tetra Tech: MW-1, MW-2, MW-3, and MW-4. All wells were drilled using a CME-75 drill rig, hollow stem augers, and split-spoon sampling techniques; 15 feet of .010 polyvinylchloride (PVC) slotted screen was placed in each well. MW-1 was installed on July 15, 2009 to a total depth of 33.73 feet bgs. The depth to water was recorded at 23.21 feet bgs during the first groundwater monitoring event, and the screened interval was placed from 18.73 feet bgs to 33.73 feet bgs. MW-2 was installed on July 16, 2009 to a total depth of 32.00 feet bgs. The screened interval was placed from 15 to 30 feet bgs and depth to water was recorded at 22.72 feet bgs during groundwater monitoring. MW-3 was installed on July 15, 2009 to a total depth of 32.55 feet bgs and the depth to water was recorded at 22.84 feet bgs. The screened interval for MW-3 was placed from 17.55 to 32.55 feet bgs. MW-4 was installed on July 15, 2009 to a total depth of 32.6 feet bgs and the depth to water was recorded at 22.62 feet bgs during groundwater monitoring conducted on July 28, 2009. The screened interval for MW-4 was placed from 17.60 to 32.60 feet bgs. Wells were constructed using 2-inch PVC casing, and were all above-ground completions set in concrete. After installation, each monitor well was developed using a 1.5-inch diameter, poly-vinyl disposable bailer. 45 gallons of water were purged from monitor wells MW-1 and MW-3, while MW-2 and MW-4 were purged of 16 gallons and 8 gallons, respectively. MW-2 and MW-4 were very slow to recharge, and the purged volumes were accomplished

after two days of development. Purge water was spread on-Site, as no hydrocarbon sheen nor odor was observed in the development water. Soil boring logs and well completion forms are included as Appendix A. A generalized geologic cross section for the Site is presented in Figure 3.

During soil boring activities July 15, 2009 and July 16, 2009, soil samples were collected from the soil borings for MW-1 and MW-2 from depths of 15'4" to 17'2" feet bgs and from 18 to 19.5 feet bgs, respectively. Soil samples were collected from MW-3 and MW-4 at depths of 18 to 20 feet bgs and from 18 to 19 feet bgs. Each soil sample was analyzed for major ions by EPA Method 300.0; for total mercury by EPA Method 7471A; total metals by EPA Methods 6010B and 6020A; semivolatile organic compounds (SVOCs) by EPA Method 8270C; volatile organic compounds (VOCs) by EPA Method 8260B; and TPH by EPA Method 418.1. None of the soil analytes were detected in concentrations above OCD recommended action levels. Results of the soil analysis are shown in Table 2 and Appendix B.

2.0 MONITORING SUMMARY, SAMPLING METHODOLOGY AND RESULTS

2.1 Monitoring Summary

A baseline groundwater quality monitoring event at the site was conducted on July 28, 2009. Prior to collection of groundwater samples from monitor well MW-1, MW-2, MW-3 and MW-4, depth to groundwater in each well was determined. Results are displayed in Table 3.

The casings for Site monitor wells were surveyed in July 2009 using the wellhead as an arbitrary reference-elevation of 100 feet above mean sea level (amsl). The data obtained from the Site survey and from the July 2009 sampling event was used to create a groundwater elevation map for the Site (Figure 4). Using this data, it was determined that the groundwater flow direction at the Site is to the north/northwest at a gradient of 0.004 feet per foot (ft/ft).

2.2 Groundwater Sampling Methodology

During the baseline groundwater monitoring event, Site monitor wells were purged of at least 3 casing volumes of groundwater using a 1.5-inch diameter, poly-vinyl disposable bailer. While bailing each well, groundwater parameter data such as temperature, pH, conductivity, total dissolved solids (TDS), oxidation-reduction potential (ORP) and dissolved oxygen (DO) were collected using a YSI 556 multi-parameter sonde and results were recorded on a Tetra Tech Water Sampling Field Form (Appendix C). Collected groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped with chain-of-custody documentation. Analysis of all groundwater samples collected during the July 2009 groundwater monitoring event were performed by Southern Petroleum Laboratory (SPL) of Houston, Texas.

During the July 2009 groundwater monitoring event, each groundwater sample collected was analyzed for major ions by EPA Method 300.0; SVOCs by EPA Method 8270C; VOCs by EPA Method 8260B; general chemistry (alkalinity, hardness, total dissolved solids, and pH); and diesel range organics (DRO) and gasoline

range organics (GRO) by EPA Method 8015B. Due to an error in the sampling process, total metals (including mercury) were not analyzed during the July 2009 sampling event. Groundwater collected during the next quarterly sampling event in September 2009 will include a dissolved metals analysis. Results of the July 2009 analyses are displayed in Table 4.

2.3 Groundwater Sampling Analytical Results

The New Mexico Water Quality Control Commission (NMWQCC) mandates that groundwater quality in New Mexico be protected, and has issued groundwater quality standards in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Groundwater quality standards have been set for the protection of human health, domestic water supply, and irrigation use. Exceedences of NMWQCC groundwater quality standards in Site monitor wells are discussed below.

- **Total Dissolved Solids**

- The groundwater quality standard for TDS is 1,000 milligrams per liter (mg/L). Groundwater collected from MW-4, the up-gradient monitor well, was found to contain TDS at a concentration of 1,660 mg/L.

No other analyzed constituents were found above NMWQCC groundwater quality standards in Site monitor wells.

The corresponding laboratory analysis reports for the July 2009 groundwater sampling event, including quality control summaries, are included in Appendix D.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Tetra Tech has installed 4 groundwater monitor wells at the Site and has conducted the first baseline groundwater monitoring event at the Site. The groundwater monitor wells will be incorporated into a quarterly monitoring schedule, and the next groundwater monitoring event at the Site is scheduled for September 2009. The groundwater flow direction at the Site was determined to be to the north/northwest as of July 2009. Tetra Tech will continue to determine the groundwater flow direction at the Site and will note any changes as they occur.

As a result of the suite of chemical analyses conducted on all groundwater monitor wells at the Site during 2009, continued groundwater quality monitoring beyond BTEX analysis is not recommended. Although the concentration of TDS in MW-4 was found above NMWQCC groundwater quality standards, this monitor well is located up-gradient from the location of the January 2009 incident, and TDS concentrations in the other 3 Site monitor wells are below the 1,000 mg/L groundwater quality standard. Furthermore, TDS will continue to be monitored with a multi-parameter sonde during collection of groundwater quality parameters prior to sampling of each monitor well in the future. In order to move toward Site closure, Tetra Tech will continue to monitor for BTEX parameters for 3 additional quarters. In addition, dissolved metals will be assessed in all Site monitor wells during the first quarterly monitoring event at the Site, which

is scheduled for September 2009. Any dissolved metal found above NMWQCC groundwater quality standards during this monitoring event will continue to be monitored at the Site.

Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetrattech.com if you have any questions or require additional information.

4.0 REFERENCES

Envirotech Incorporated (2009). *Burlington Resources Spill Closure Report Located at San Juan 27-5 #34A, Section 30, Township 27N, Range 5W, Rio Arriba County, New Mexico*. Prepared for ConocoPhillips Company. Report Dated March 20, 2009. 3 pp (not including Figures, Tables, and Appendices).

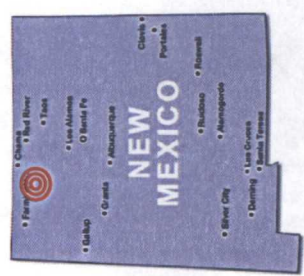
FIGURES



Image NMRGIS
©/2009 Tele Atlas

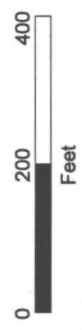
FIGURE 1.

Site Location Map
ConocoPhillips
San Juan 27-5 #34A
Rio Arriba County, NM



ConocoPhillips
San Juan 27-5 #34A Site
Location

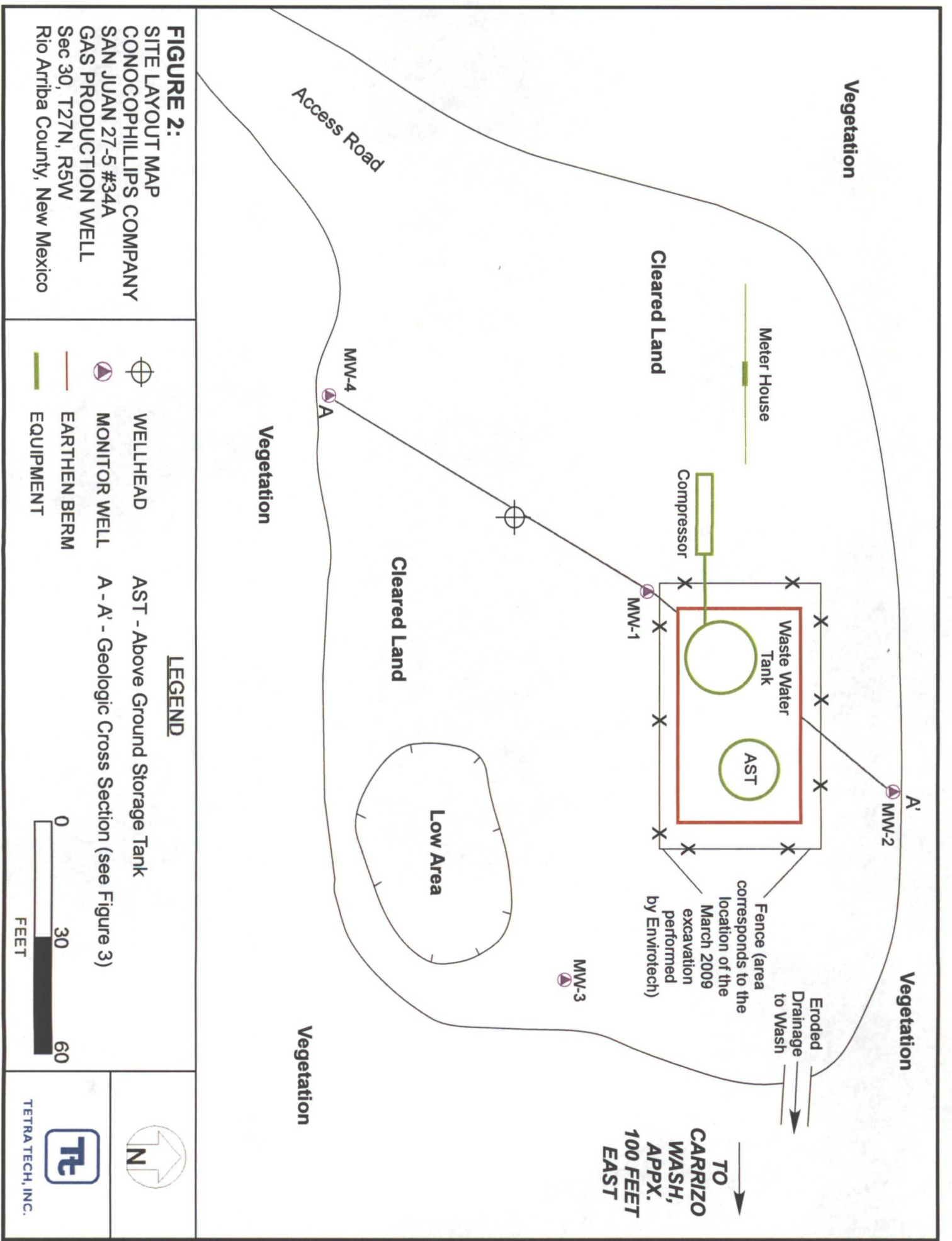
Latitude: 34.547445° N
Longitude: -107.406587° W



Source: Google™ Earth



TETRA TECH, INC.



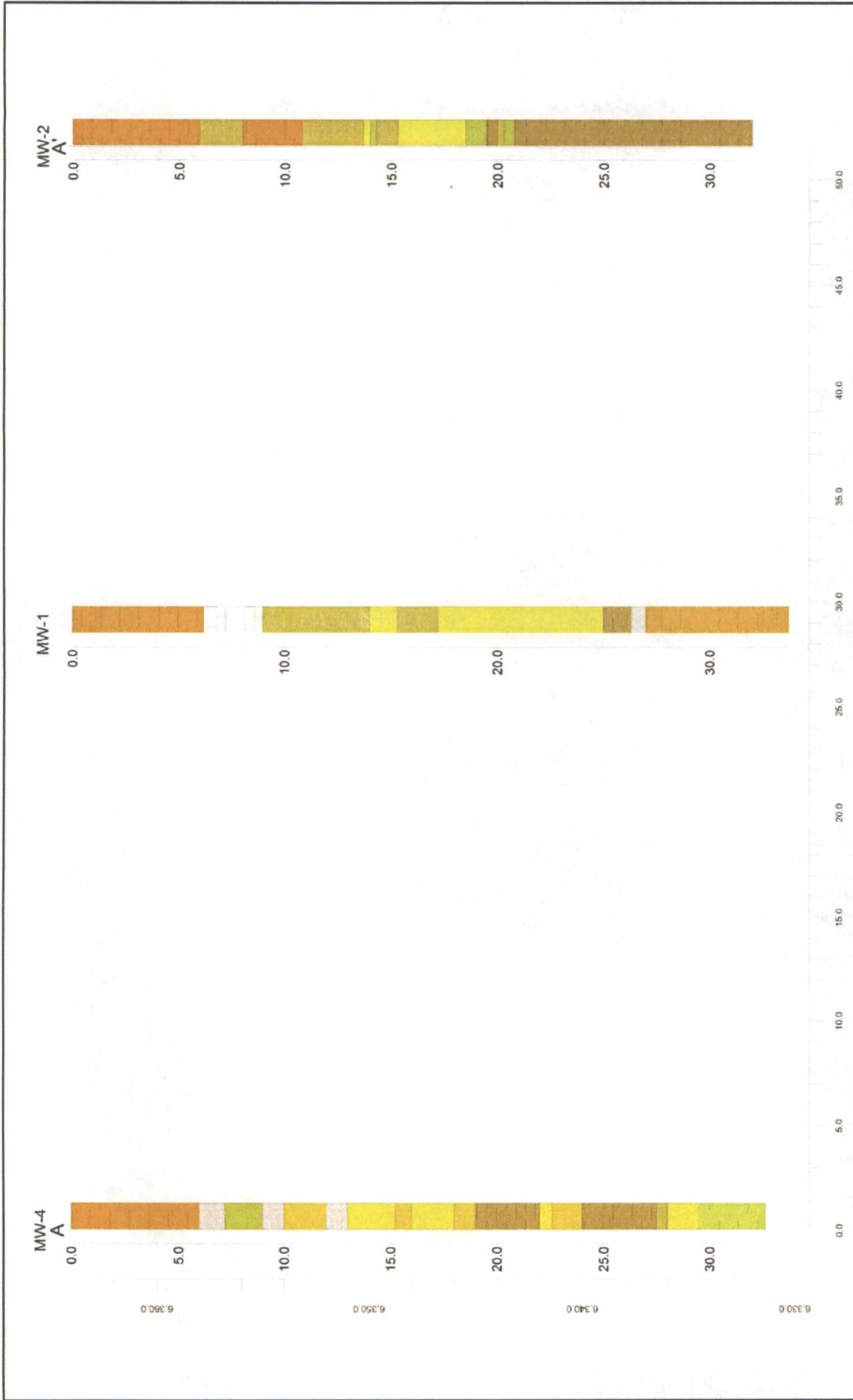


FIGURE 3:
 GENERALIZED GEOLOGIC CROSS
 SECTION
 CONOCOPHILLIPS COMPANY
 San Juan 27-5 #34A
 Sec 30, T27N, R5W
 Rio Arriba County, New Mexico

Note: Groundwater elevations are relative to the wellhead, set at 100 feet above mean sea level.

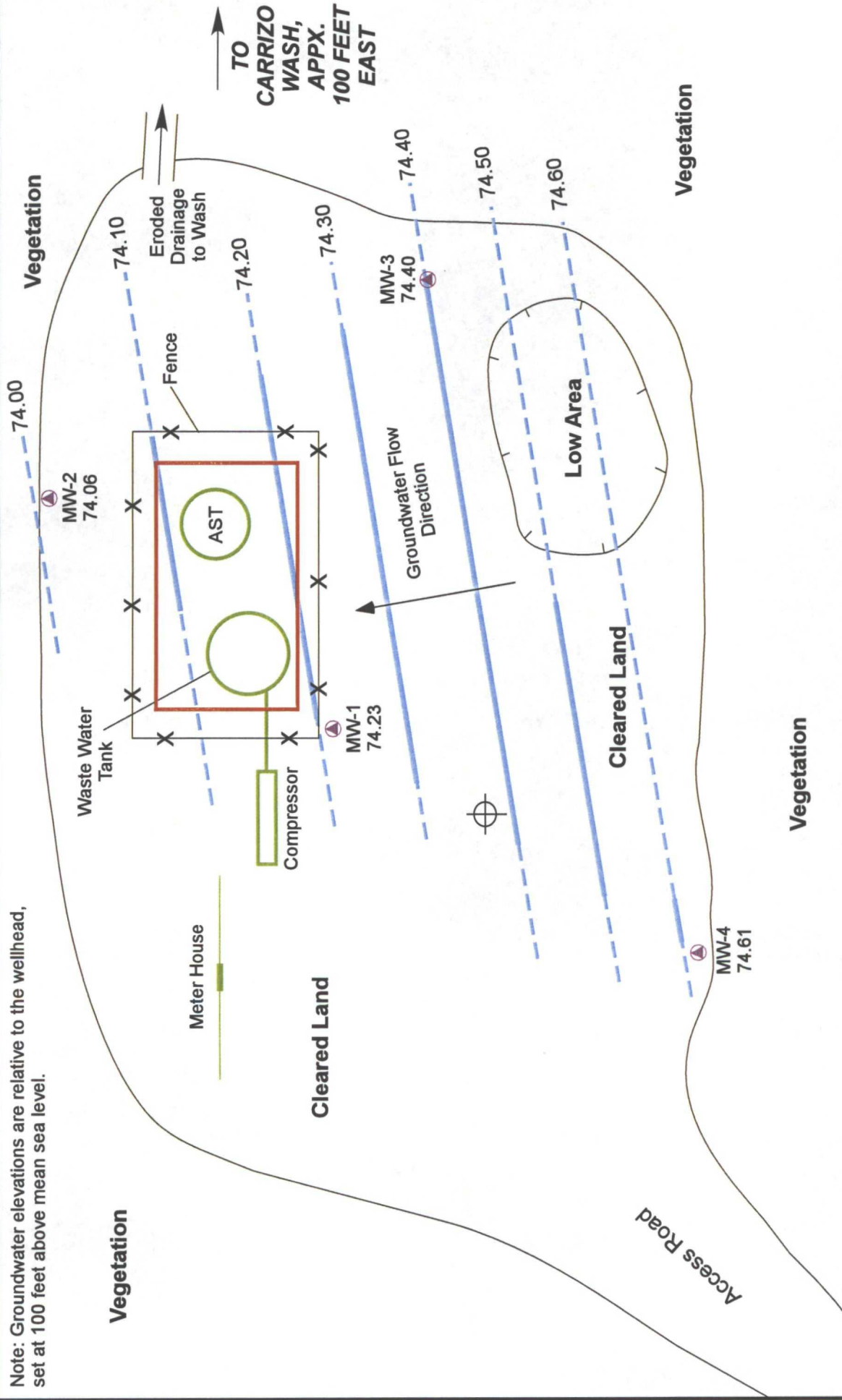


FIGURE 4:
 GROUNDWATER ELEVATION MAP
 JULY 2009
 CONOCOPHILLIPS COMPANY
 SAN JUAN 27-5 #34A
 GAS PRODUCTION WELL
 Sec 30, T27N, R5W
 Rio Arriba County, New Mexico

- LEGEND**
- WELLHEAD
 - MONITOR WELL
 - EARTHEN BERM
 - EQUIPMENT
 - AST - Above Ground Storage Tank
 - GROUNDWATER ELEVATION (dashed where inferred)

TETRA TECH, INC.



TABLES

Table 1. Site History
Tetra Tech, Inc.

ConocoPhillips Company
San Juan 27-5 #34A

DATE	ACTIVITY
January 30, 2009	During removal of an aboveground storage tank (AST) at the Site, hydrocarbon impacts beneath the AST were visually confirmed. ConocoPhillips Company contacted Envirotech Inc. of Farmington, NM (Envirotech) for spill assessment services following the discovery. Envirotech collected a total of 6 soil samples during the assessment: a 5-point composite soil sample from just beneath the AST; 4 grab soil samples from test holes dug around the AST in order to delineate the extent of hydrocarbon impact (depth of these samples ranged from 10 to 15 feet below ground surface (bgs)); and another 5-point composite soil sample collected from "a small area...excavated to approximately 17 [feet] bgs..." (Envirotech, 2009). All soil samples collected were analyzed in the field for total petroleum hydrocarbons (TPH) using Environmental Protection Agency (EPA) method 418.1 and for organic vapors using a photoionization detector (PID). The two composite soil samples were also sent for laboratory analysis of benzene and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021, and the composite soil sample collected at a depth of 17 feet bgs was submitted for TPH analysis using EPA Method 8015. The New Mexico Oil Conservation Division (OCD) recommended remediation action levels for the Site were determined to be 100 parts per million (ppm) organic vapor, 100 ppm TPH, 10 ppm benzene, and 50 ppm for BTEX. All soil sample results were below these action levels except for those collected from one of the test holes (test hole 1) and from both composite samples collected at the surface beneath the AST and from the bottom of the excavation at 17 feet bgs (Appendix A).
March 3, 2009	Envirotech Inc. of Farmington, NM (Envirotech) returned to the Site to continue sampling activities. Envirotech stated that prior to their arrival, the "spill area was excavated to extents of 49' x 49' x 20' deep where groundwater was encountered..." (Envirotech, 2009). Envirotech collected a composite sample from the bottom of the excavation and from each of the 4 walls. Soil samples were analyzed for TPH and organic vapors in the field, and all results were below OCD action levels for organic vapors. The concentration of TPH found in the soil sample collected from the south wall was 2,170 ppm; all other TPH results were below OCD action levels (Appendix A).
March 3, 2009	The excavation was continued along the south wall an additional 4 feet and another soil sample was collected for TPH analysis. TPH results were found to be below OCD action levels and the excavation was discontinued at this point. Final excavation dimensions were reported at 53 feet by 49 feet by 20 feet deep. Groundwater was reached at this depth and had begun to seep into the excavation. A groundwater sample was collected and was sent to an analytical laboratory for volatile organic compound (VOC) analysis using EPA Method 8260. Laboratory results for benzene were found at a concentration of 95.6 micrograms per liter (ug/L), above the 10 ug/L New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standard for this constituent (Envirotech, 2009).
March 20, 2009	A report submitted to ConocoPhillips stated that a total of 1,900 cubic yards of soil were removed from the Site and were transported to an OCD-permitted facility on Crouch Mesa in Farmington, NM. Envirotech recommended the installation of groundwater monitoring wells at the Site to determine "groundwater gradient and the extent of groundwater contamination" (Envirotech, 2009).

Table 1. Site History
Tetra Tech, Inc.

ConocoPhillips Company
San Juan 27-5 #34A

DATE	ACTIVITY
April 2, 2009	Tetra Tech conducted a Site visit to determine placement of proposed groundwater monitoring wells.
July 15, 2009 & July 16, 2009	Four groundwater monitor wells are installed by Tetra Tech (MW-1, MW-2, MW-3, MW-4).
July 28, 2009	A baseline groundwater monitoring event was conducted at the Site by Tetra Tech.

Table 2. Soil Boring Laboratory Analytical Results

Constituent			Sample ID (soil samples collected on July 15th, 2009 and July 16th, 2009)				
Ions	Method	Units	MW-1 (15'4" - 17'2")	MW-2 (18' - 19.5')	MW-3 (18 - 20')	MW-4 (18' - 19')	NMOCD
Bromide	E300.0	mg/kg - dry	< 6.41	< 6.35	< 5.34	< 5.67	NE
Chloride	E300.0	mg/kg - dry	570	< 6.35	< 5.34	< 5.67	NE
Fluoride	E300.0	mg/kg - dry	< 6.41	< 6.35	< 5.34	< 5.67	NE
Orthophosphate (as P)	E300.0	mg/kg - dry	< 6.41	< 6.35	< 5.34	< 5.67	NE
Sulfate	E300.0	mg/kg - dry	96.3	103	28	61.7	NE
Nitrate (as N)	E300.0	mg/kg - dry	< 6.41	< 6.35	< 5.34	< 5.67	NE
Nitrite (as N)	E300.0	mg/kg - dry	< 6.41	< 6.35	< 5.34	< 5.67	NE
Metals, Total	Method	Units	MW-1 (15'4" - 17'2")	MW-2 (18' - 19.5')	MW-3 (18 - 20')	MW-4 (18' - 19')	NMOCD
Mercury	SW7471A	mg/kg - dry	< 0.0385	< 0.0381	< 0.0321	< 0.034	NE
Aluminum	SW6010B	mg/kg - dry	9,450	11,300	3,020	6,130	NE
Boron	SW6010B	mg/kg - dry	2.71	2.53	< 1.07	1.68	NE
Calcium	SW6010B	mg/kg - dry	6,980	7,750	4,940	4,880	NE
Iron	SW6010B	mg/kg - dry	13,900	15,200	4,660	8,870	NE
Magnesium	SW6010B	mg/kg - dry	3,070	3,470	785	1,600	NE
Potassium	SW6010B	mg/kg - dry	1,660	1,720	415	948	NE
Sodium	SW6010B	mg/kg - dry	1,170	800	425	843	NE
Strontium	SW6010B	mg/kg - dry	63.5	66.2	16.1	36	NE
Tin	SW6010B	mg/kg - dry	0.731	0.825	< 0.534	0.646	NE
Antimony	SW6020A	mg/kg - dry	< 0.641	< 0.635	< 0.534	< 0.567	NE
Arsenic	SW6020A	mg/kg - dry	3.38	3.43	1.94	4.22	NE
Barium	SW6020A	mg/kg - dry	181	274	129	178	NE
Beryllium	SW6020A	mg/kg - dry	0.666	0.696	< 0.428	< 0.454	NE
Cadmium	SW6020A	mg/kg - dry	< 0.641	< 0.635	< 0.534	< 0.567	NE
Chromium	SW6020A	mg/kg - dry	11.2	14	3.28	6.78	NE
Cobalt	SW6020A	mg/kg - dry	7.22	7.31	1.77	3.83	NE
Copper	SW6020A	mg/kg - dry	15.1	15.6	3.85	8.46	NE
Lead	SW6020A	mg/kg - dry	8.67	8.87	2.81	6.16	NE
Manganese	SW6020A	mg/kg - dry	311	373	191	226	NE
Molybdenum	SW6020A	mg/kg - dry	< 0.641	< 0.635	< 0.534	< 0.567	NE
Nickel	SW6020A	mg/kg - dry	11.3	11.5	3.08	6.43	NE
Selenium	SW6020A	mg/kg - dry	< 3.21	< 3.17	< 0.534	< 2.83	NE
Silver	SW6020A	mg/kg - dry	< 0.641	< 0.635	< 0.534	< 0.567	NE
Thallium	SW6020A	mg/kg - dry	< 0.641	< 0.635	< 0.534	< 0.567	NE
Vanadium	SW6020A	mg/kg - dry	23.5	24.9	9.27	15.2	NE
Zinc	SW6020A	mg/kg - dry	38.5	43.2	11.1	21.7	NE
SVOCS (detections only)	Method	Units	MW-1 (15'4" - 17'2")	MW-2 (18' - 19.5')	MW-3 (18 - 20')	MW-4 (18' - 19')	NMOCD
As listed	8270C	µg/kg - dry	--	--	--	--	--
VOCs (detections and BTEX only)	Method	Units	MW-1 (15'4" - 17'2")	MW-2 (18' - 19.5')	MW-3 (18 - 20')	MW-4 (18' - 19')	NMOCD
Methylene Chloride	8260B	µg/kg - dry	13	< 6.3	< 5.3	< 5.7	NE
Benzene	8260B	µg/kg - dry	< 6.4	< 6.3	< 5.3	< 5.7	10,000
Toluene	8260B	µg/kg - dry	< 6.4	< 6.3	< 5.3	< 5.7	NE
Ethylbenzene	8260B	µg/kg - dry	< 6.4	< 6.3	< 5.3	< 5.7	NE
Total Xylenes	8260B	µg/kg - dry	< 6.4	< 6.3	< 5.3	< 5.7	NE
Total BTEX	--	µg/kg - dry	< 6.4	< 6.3	< 5.3	< 5.7	50,000
Other	Method	Units	MW-1 (15'4" - 17'2")	MW-2 (18' - 19.5')	MW-3 (18 - 20')	MW-4 (18' - 19')	NMOCD
Alkalinity	E310.1	mg/kg - dry	397	470	203	590	NE
Percent Moisture	D2216	%	22	21.2	6.44	11.8	NE
Petroleum Hydrocarbons	Method	Units	MW-1 (15'4" - 17'2")	MW-2 (18' - 19.5')	MW-3 (18 - 20')	MW-4 (18' - 19')	NMOCD
Total Petroleum Hydrocarbons	418.1	mg/kg - dry	< 13	< 13	< 11	11	100

Notes:

MW = monitor 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

Table 3. Groundwater Elevation Data Summary

Well ID	Total Depth (ft bgs)	Screen Interval (ft)	*Elevation (ft) (TOC)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Groundwater Elevation
MW-1	33.22	18.73 - 33.73	97.44	7/28/2009	23.21	74.23
MW-2	34.35	15.00 - 30.00	96.78	7/28/2009	22.72	74.06
MW-3	33.15	17.55 - 32.55	97.24	7/28/2009	22.84	74.40
MW-4	32.65	17.60 - 32.60	97.23	7/28/2009	22.62	74.61

ft = Feet

TOC = Top of casing

bgs = below ground surface

* Elevation relative to wellhead, set at 100 feet.

Table 4. Groundwater Laboratory Analytical Results Summary, Baseline Parameters

Constituent		Sample ID (samples collected on July 28, 2009)							
	Ions	Method	Units	MW-1	MW-2	Duplicate	MW-3	MW-4	NMWQCC Groundwater Quality Standard
	Bromide	E300.0	mg/L	< 0.5	< 0.5	NA	< 0.5	< 0.5	NE
	Chloride	E300.0	mg/L	4.16	11.1	NA	4.46	8.42	250
	Fluoride	E300.0	mg/L	0.579	0.613	NA	< 0.5	0.767	1.6
	Orthophosphate (as P)	E300.0	mg/L	< 0.5	< 0.5	NA	< 0.5	< 0.5	NE
	Sulfate	E300.0	mg/L	85	81.4	NA	65.8	103	600
	Nitrate (as N)	E300.0	mg/L	< 0.5	< 0.5	NA	< 0.5	< 0.5	10
	Nitrite (as N)	E300.0	mg/L	< 0.5	< 0.5	NA	< 0.5	< 0.5	NE
SVOCS (detections only)		Method	Units	MW-1	MW-2	Duplicate	MW-3	MW-4	NMWQCC Groundwater Quality Standard
As listed		8270C	--	--	--	NA	--	--	NE
VOCs (detections and BTEX only)		Method	Units	MW-1	MW-2	Duplicate	MW-3	MW-4	NMWQCC Groundwater Quality 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	Duplicate	MW-3	MW-4	NMWQCC Groundwater Quality Standard
	Alkalinity (as Calcium Carbonate)	SM2320B	mg/L	306	296	NA	317	333	NE
	Hardness (as Calcium Carbonate)	SM2340C	mg/L	80	116	NA	132	1,050	NE
	Specific Conductance @ 25C	E120.1	umhos/cm	771	770	NA	753	899	NE
	Total Dissolved Solids	SM2540C	mg/L	750	854	NA	622	1,660	1,000
	pH	SM4500H	pH units	7.68	7.92	NA	7.47	7.92	6 - 9
	Diesel Range Organics*	SW8015B	mg/L	0.11	0.19	NA	0.16	0.18	NE
	Gasoline Range Organics	SW8015B	mg/L	< 0.1	< 0.1	NA	< 0.1	< 0.1	NE

Notes:

MW = monitoring well
 NMWQCC = New Mexico Water Quality Control Commission
 Constituents in **BOLD** are in excess of NMWQCC groundwater quality standards
 SVOCS = semi-volatile organic compounds
 VOCs = volatile organic compounds
 mg/L = milligrams per liter
 µg/L = micrograms per liter
 P = phosphate
 N = nitrogen
 C = Celsius
 NE = not established
 NA = not analyzed
 umhos/cm - micromhos per centimeter
 Tetra Tech, Inc.

APPENDICES

APPENDIX A

Soil Boring Logs and Well Completion Forms



TETRA TECH, INC.

Well Completion Diagram

Well ID MW-1

Job Name San Juan 27-5 #34A

Job No. 114-690113 Date 7/15/2009

Project Manager Kelly Blanchard

Well I.D. MW-1

Field Geologist Gary Desselle

Driller Enviro-Drill

Equipment CME 75

Materials

425 Pounds Silica Sand Filter Pack

50 Pounds 3/8" hole plug Bentonite Seal

25 Gallons Grout

120 Pounds Concrete

 Feet of native fill/ slough

18.73 Feet of 2 inch pvc Blank Casing

15 Feet of 2 inch 010 pvc Slotted Screen

 Feet of Outer Casing

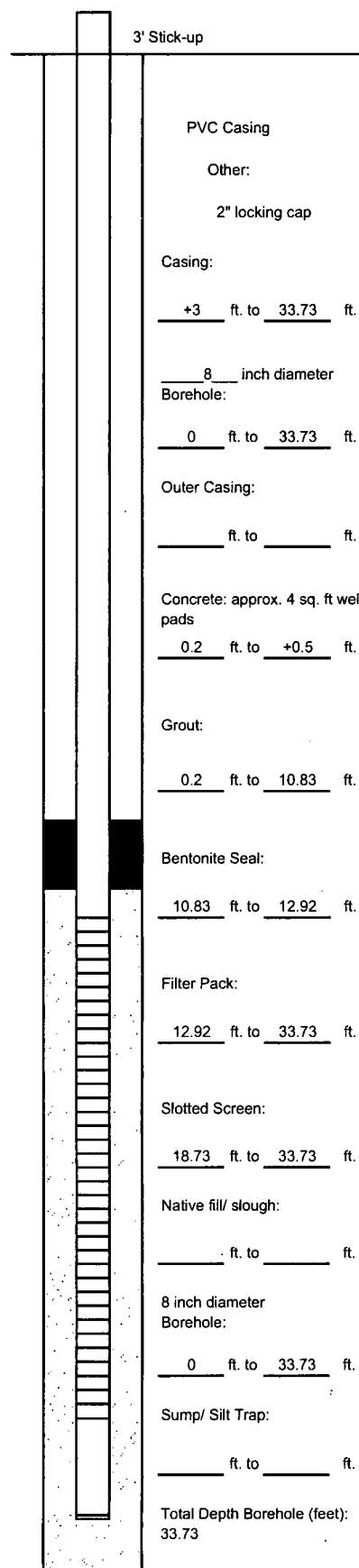
 Feet of Sump/ Silt Trap

Placement Method PourNotes Casing and screen joint type - flush thread

Development

Method Hand-bailDate 7/16/2009Amount Purged 45 gallons

Notes





Tetra Tech

Site Location: Rio Arriba County

Project: San Juan 27-5 #34A

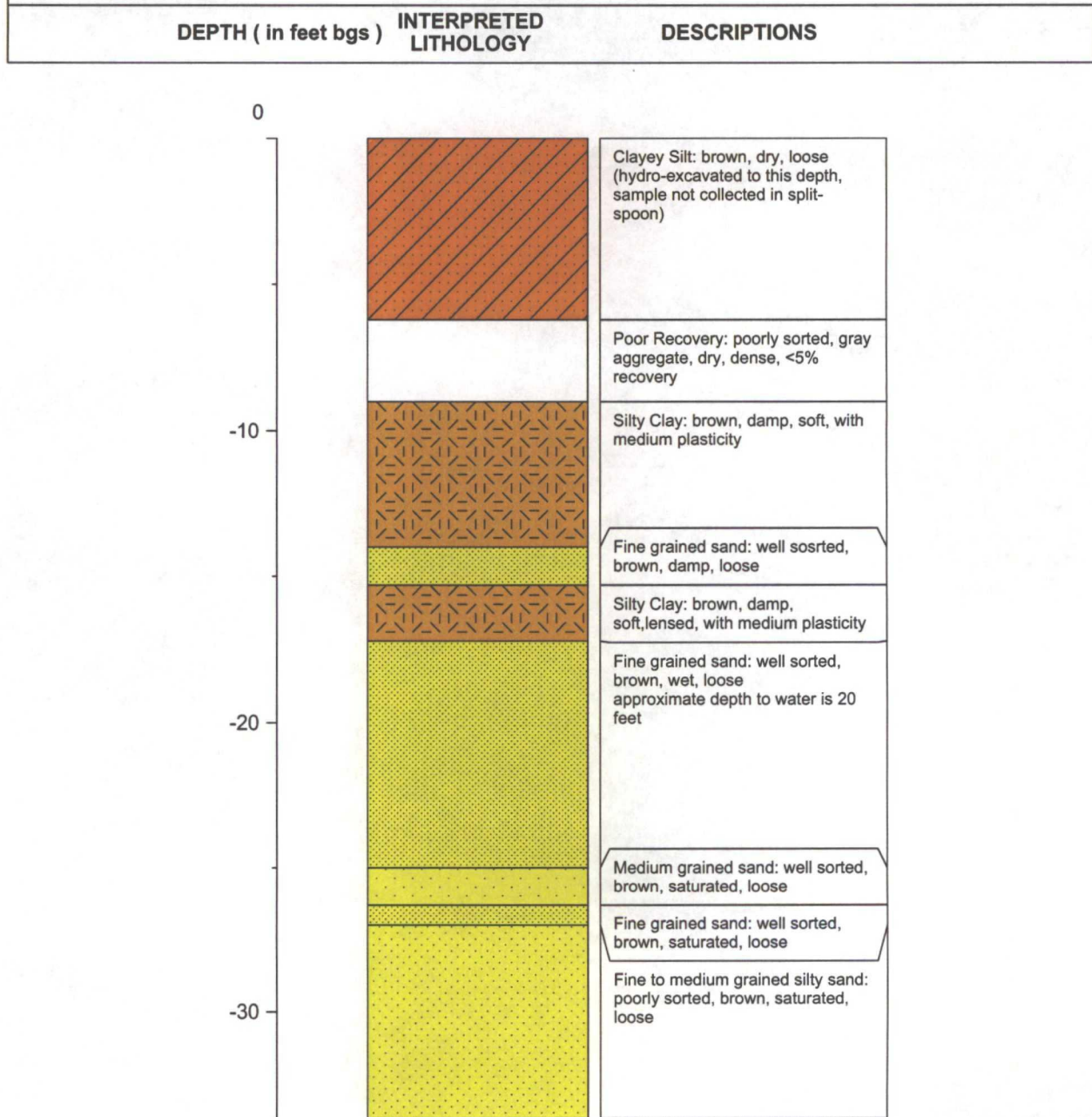
Boring advanced by: Shad Betts of Enviro Drill

Date advanced: 7/15/2009

Boring ID: MW-1

Logged by: Gary Desselle

Total depth: 33.73 feet





TETRA TECH, INC.

Well Completion Diagram

Well ID MW-2

Job Name San Juan 27-5 #34A

Job No. 114-690113 Date 7/16/2009

Project Manager Kelly Blanchard

Well I.D. MW-2

Field Geologist Gary Desselle, Christine Mathews

Driller Enviro-Drill

Equipment CME 75

Materials

400 Pounds Silica Sand Filter Pack

50 Pounds "Quick Gel" powder Bentonite Seal

25 Gallons Grout

120 Pounds Concrete

 Feet of native fill/ slough

15 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

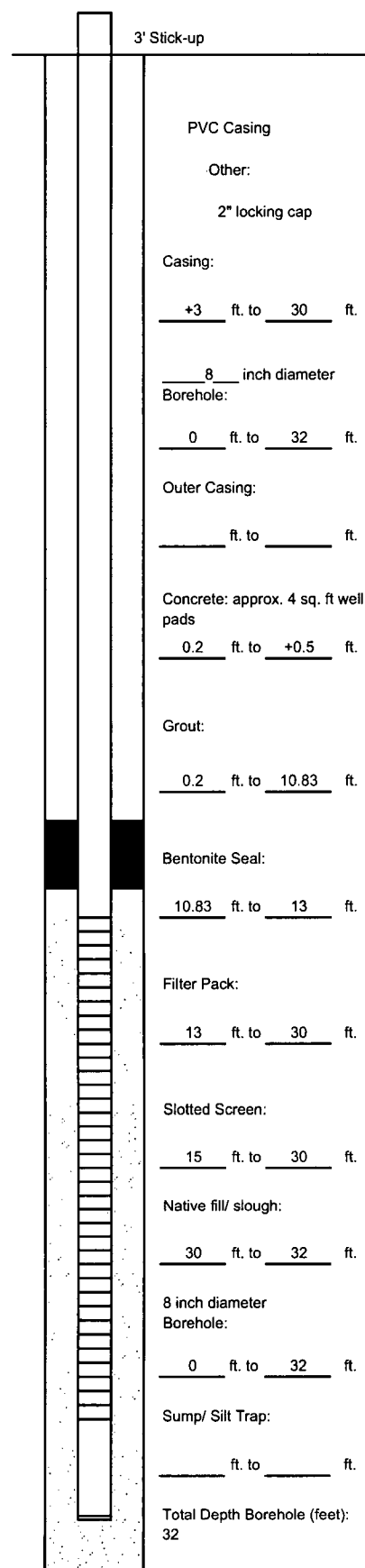
Development

Method Hand-bail

Date 7/16/2009 and 7/17/09

Amount Purged 16 gallons

Notes Slow to recharge after one casing volume purged.





Tetra Tech

Site Location: Rio Arriba County

Project: San Juan 27-5 #34A

Boring advanced by: Shad Betts of Enviro Drill

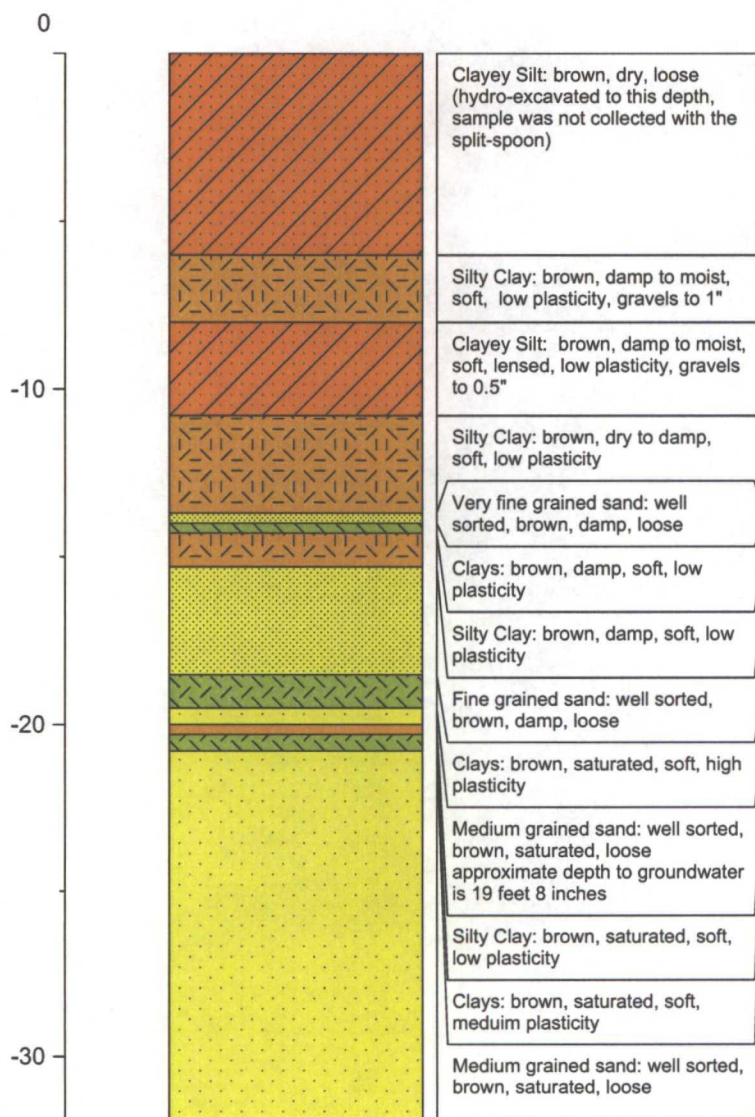
Date advanced: 7/16/2009

Boring ID: MW-2

Logged by: Gary Desselle

Total depth: 32 feet

DEPTH (in feet bgs)	INTERPRETED LITHOLOGY	DESCRIPTIONS
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TETRA TECH, INC.

Well Completion Diagram

Well ID MW-3

Job Name San Juan 27-5 #34A

Job No. 114-690113 Date 7/15/2009

Project Manager Kelly Blanchard

Well I.D. MW-3

Field Geologist Gary Desselle, Christine Mathews

Driller Enviro-Drill

Equipment CME 75

Materials

500 Pounds Silica Sand Filter Pack

50 Pounds 3/8" Hole Plug Bentonite Seal

25 Gallons Grout

120 Pounds Concrete

 Feet of native fill/ slough

17.55 Feet of 2 inch pvc Blank Casing

15 Feet of 2 inch 010 pvc Slotted Screen

 Feet of Outer Casing

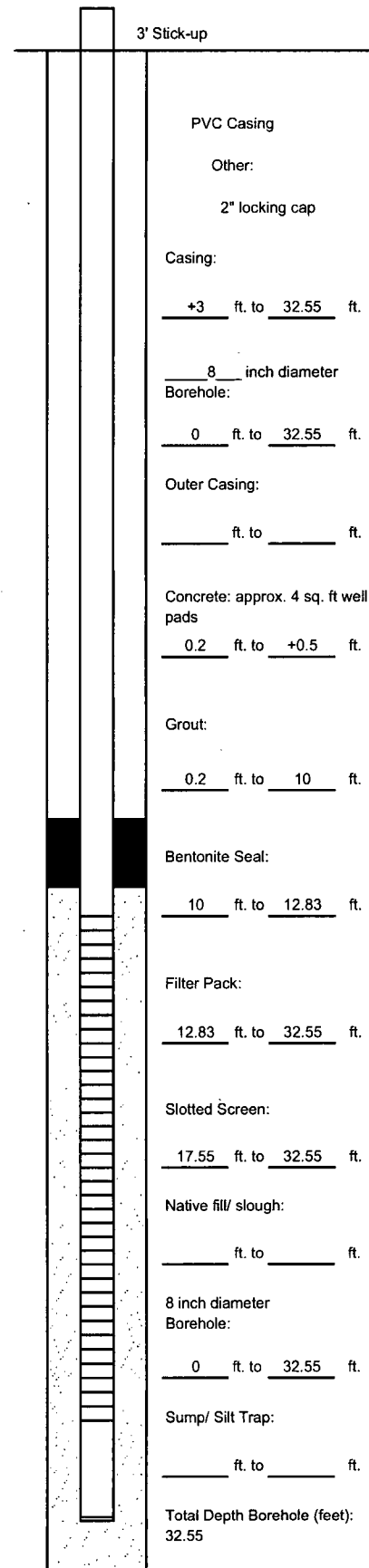
 Feet of Sump/ Silt Trap

Placement Method PourNotes Casing and screen joint type - flush thread

Development

Method Hand-bailDate 7/16/2009Amount Purged 45 gallons

Notes





Tetra Tech

Site Location: Rio Arriba County

Project: San Juan 27-5 #34A

Boring advanced by: Shad Betts of Enviro Drill

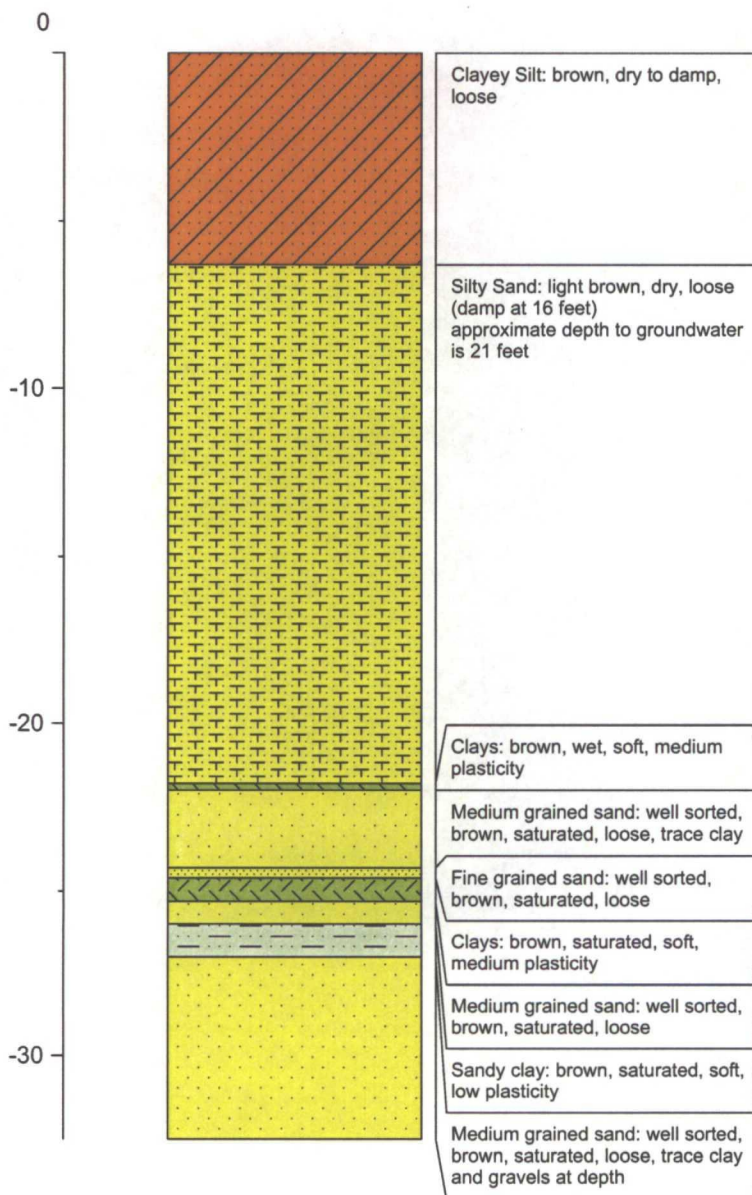
Date advanced: 7/15/2009

Boring ID: MW-3

Logged by: Gary Desselle

Total depth: 32.55 feet

DEPTH (in feet bgs)	INTERPRETED LITHOLOGY	DESCRIPTIONS
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TETRA TECH, INC.

Well Completion Diagram

Well ID MW-4

Job Name San Juan 27-5 #34A

Job No. 114-690113 Date 7/15/2009

Project Manager Kelly Blanchard

Well I.D. MW-4

Field Geologist Gary Desselle, Christine Mathews

Driller Enviro-Drill

Equipment CME 75

Materials

437.5 Pounds Silica Sand Filter Pack

50 Pounds Baroid Hole Plug Bentonite Seal

25 Gallons Halliburton Quik Grout/Quickcrete Grout

120 Pounds Concrete

 Feet of native fill/ slough

17.55 Feet of 2 inch pvc Blank Casing

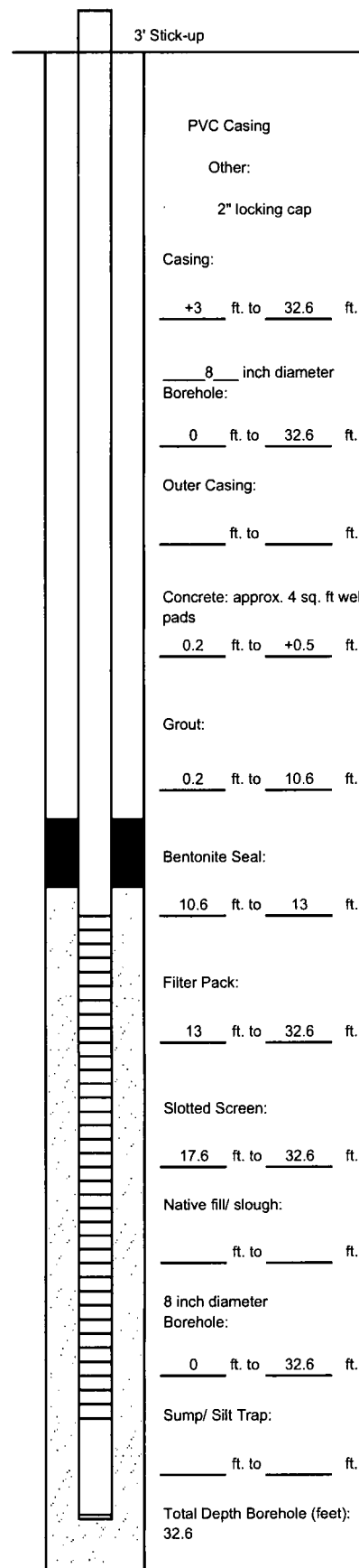
15 Feet of 2 inch 010 pvc Slotted Screen

 Feet of Outer Casing

 Feet of Sump/ Silt Trap

Placement Method PourNotes Casing and screen joint type - flush thread

Development

Method Hand-bailDate 7/16/2009 and 7/17/2009Amount Purged 8 gallonsNotes Slow to recharge after one casing volume purged



Tetra Tech

Site Location: Rio Arriba County

Project: San Juan 27-5 #34A

Boring advanced by: Shad Betts of Enviro Drill

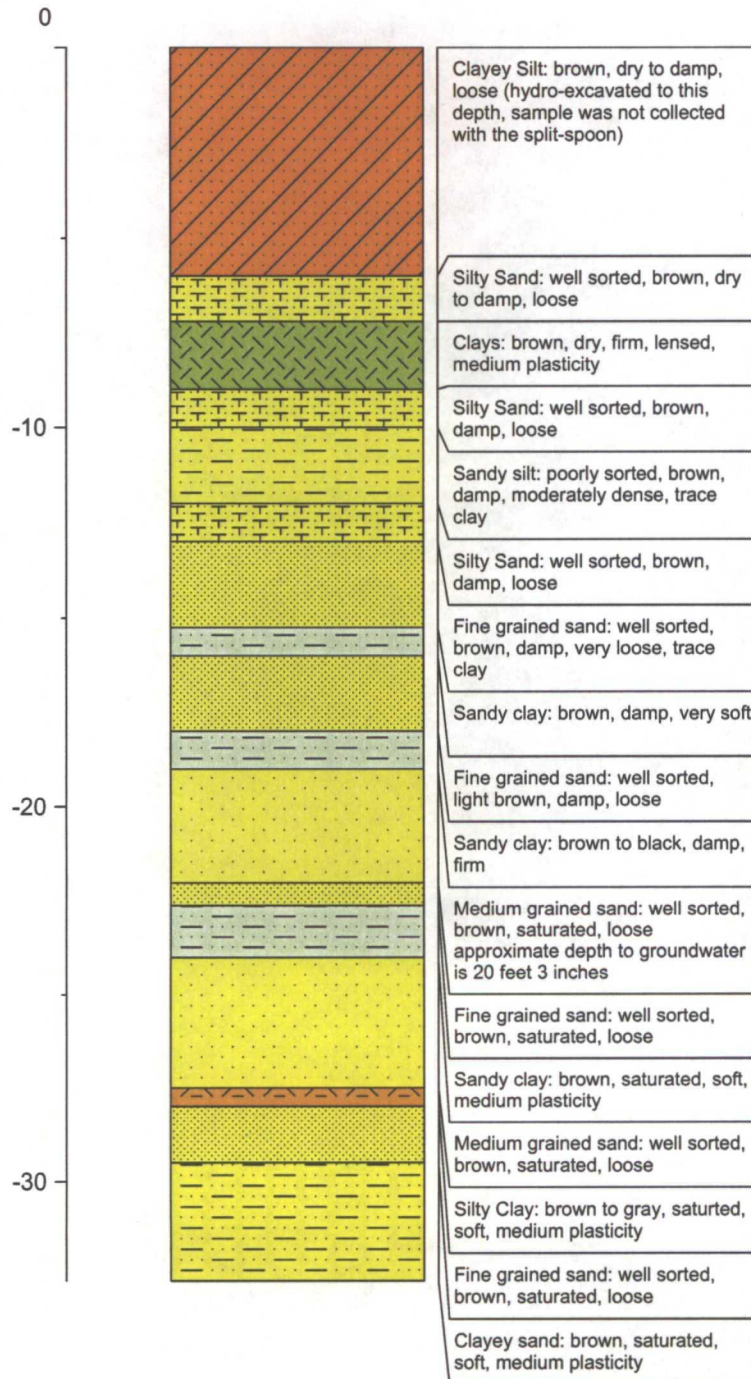
Date advanced: 7/15/2009

Boring ID: MW-4

Logged by: Gary Desselle

Total depth: 32.6 feet

DEPTH (in feet bgs)	INTERPRETED LITHOLOGY	DESCRIPTIONS
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APPENDIX B

Soil Boring Laboratory Analysis Report



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

Conoco Phillips

Certificate of Analysis Number:

09070987

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:

San Juan 27-5#34A

Site:

Rio Ariba County, NM

Site Address:

PO Number:

State:

New Mexico

State Cert. No.:

Date Reported:

8/4/2009

This Report Contains A Total Of 74 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

8/4/2009

Date



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

Case Narrative for:
Conoco Phillips

Certificate of Analysis Number:

09070987

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: San Juan 27-5#34A Site: Rio Ariba County, NM Site Address: PO Number: State: New Mexico State Cert. No.: Date Reported: 8/4/2009
---	---

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSES AND EXCEPTIONS:

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.

III. GENERAL REPORTING COMMENTS:

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

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

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

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

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

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

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

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Erica Cardenas
Project Manager

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

09070987 Page 1

8/4/2009

Date



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

Conoco Phillips

Certificate of Analysis Number:

09070987

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: San Juan 27-5#34A
Site: Rio Arriba County, NM
Site Address:

PO Number:
State: New Mexico

State Cert. No.:

Date Reported: 8/4/2009

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-1 (15'4"-17'2")	09070987-01	Soil	7/15/2009 9:35:00 AM	7/20/2009 9:00:00 AM	327650	☐
MW-4 (18'-19')	09070987-02	Soil	7/15/2009 11:50:00 AM	7/20/2009 9:00:00 AM	327650	☐
MW-3 (18'-20')	09070987-03	Soil	7/15/2009 2:17:00 PM	7/20/2009 9:00:00 AM	327650	☐
MW-2 (18'-19.5')	09070987-04	Soil	7/16/2009 9:17:00 AM	7/20/2009 9:00:00 AM	327650	☐
Trip Blank	09070987-05	Waste	7/17/2009 12:30:00 PM	7/20/2009 9:00:00 AM	327650	☐

Erica Cardenas

8/4/2009

Erica Cardenas
Project Manager

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer



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

Client Sample ID: MW-1 (15'4"-17'2")

Collected: 07/15/2009 9:35

SPL Sample ID: 09070987-01

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL				MCL	E310.1	Units: mg/Kg-dry	
Alkalinity, Total (As CaCO ₃)	397		25.6	1	07/22/09 9:30	PAC	5124585
ION CHROMATOGRAPHY				MCL	E300.0 MOD	Units: mg/kg-dry	
Bromide	ND		6.41	1	07/21/09 17:11	BDG	5127234
Chloride	570		32.1	5	07/24/09 17:00	BDG	5129964
Fluoride	ND		6.41	1	07/21/09 17:11	BDG	5127234
Ortho-phosphate (As P)	ND		6.41	1	07/28/09 13:47	BDG	5132174
Sulfate	96.3		6.41	1	07/21/09 17:11	BDG	5127234
Nitrogen, Nitrate (As N)	ND		6.41	1	07/21/09 17:11	BDG	5127177
Nitrogen, Nitrite (As N)	ND		6.41	1	07/21/09 17:11	BDG	5127177
MERCURY, TOTAL				MCL	SW7471A	Units: mg/kg-dry	
Mercury	ND		0.0385	1	07/21/09 16:27	F_S	5123705

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	07/21/2009 13:10	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/kg-dry	
Aluminum	9450		12.8	1	08/04/09 12:20	AB1	5141312
Boron	2.71		1.28	1	08/04/09 12:20	AB1	5141312
Calcium	6980		12.8	1	08/04/09 12:20	AB1	5141312
Iron	13900		1.28	1	08/04/09 12:20	AB1	5141312
Magnesium	3070		12.8	1	08/04/09 12:20	AB1	5141312
Potassium	1660		64.1	1	08/04/09 12:20	AB1	5141312
Sodium	1170		12.8	1	08/04/09 12:20	AB1	5141312
Strontium	63.5		0.385	1	08/04/09 12:20	AB1	5141312
Tin	0.731		0.641	1	08/04/09 12:20	AB1	5141312

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	07/23/2009 11:15	R_V	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



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

Client Sample ID: MW-1 (15'4"-17'2")

Collected: 07/15/2009 9:35

SPL Sample ID: 09070987-01

Site: Rio Arriba County, 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		0.641	1	07/27/09 20:43	S_C	5132632
Arsenic	3.38		0.641	1	07/29/09 23:32	EG	5134469
Barium	181		0.641	1	07/29/09 23:32	EG	5134469
Beryllium	0.666		0.513	1	07/27/09 20:43	S_C	5132632
Cadmium	ND		0.641	1	07/27/09 20:43	S_C	5132632
Chromium	11.2		0.641	1	07/28/09 19:28	S_C	5134061
Cobalt	7.22		0.641	1	07/27/09 20:43	S_C	5132632
Copper	15.1		0.641	1	07/29/09 23:32	EG	5134469
Lead	8.67		0.641	1	07/27/09 20:43	S_C	5132632
Manganese	311		0.641	1	07/27/09 20:43	S_C	5132632
Molybdenum	ND		0.641	1	07/27/09 20:43	S_C	5132632
Nickel	11.3		0.641	1	07/27/09 20:43	S_C	5132632
Selenium	ND		3.21	5	08/04/09 7:02	S_C	5140752
Silver	ND		0.641	1	07/27/09 20:43	S_C	5132632
Thallium	ND		0.641	1	07/27/09 20:43	S_C	5132632
Vanadium	23.5		0.641	1	07/29/09 23:32	EG	5134469
Zinc	38.5		1.28	1	07/29/09 23:32	EG	5134469

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	08/03/2009 12:30	R_V	1.00
SW3050B	07/23/2009 11:15	R_V	1.00

PERCENT MOISTURE		MCL	D2216	Units: wt%	
Percent Moisture	22	0	1	07/20/09 14:51	EB1 5121386

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 (15'4"-17'2")

Collected: 07/15/2009 9:35

SPL Sample ID: 09070987-01

Site: Rio Ariba County, 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		210	1	07/23/09 20:09	GY	5128550
1,2-Dichlorobenzene	ND		210	1	07/23/09 20:09	GY	5128550
1,2-Diphenylhydrazine	ND		210	1	07/23/09 20:09	GY	5128550
1,3-Dichlorobenzene	ND		210	1	07/23/09 20:09	GY	5128550
1,4-Dichlorobenzene	ND		210	1	07/23/09 20:09	GY	5128550
2,4,5-Trichlorophenol	ND		210	1	07/23/09 20:09	GY	5128550
2,4,6-Trichlorophenol	ND		210	1	07/23/09 20:09	GY	5128550
2,4-Dichlorophenol	ND		210	1	07/23/09 20:09	GY	5128550
2,4-Dimethylphenol	ND		210	1	07/23/09 20:09	GY	5128550
2,4-Dinitrophenol	ND		210	1	07/23/09 20:09	GY	5128550
2,4-Dinitrotoluene	ND		210	1	07/23/09 20:09	GY	5128550
2,6-Dinitrotoluene	ND		210	1	07/23/09 20:09	GY	5128550
2-Chloronaphthalene	ND		210	1	07/23/09 20:09	GY	5128550
2-Chlorophenol	ND		210	1	07/23/09 20:09	GY	5128550
2-Methylnaphthalene	ND		210	1	07/23/09 20:09	GY	5128550
2-Nitroaniline	ND		210	1	07/23/09 20:09	GY	5128550
2-Nitrophenol	ND		210	1	07/23/09 20:09	GY	5128550
3,3'-Dichlorobenzidine	ND		210	1	07/23/09 20:09	GY	5128550
3-Nitroaniline	ND		210	1	07/23/09 20:09	GY	5128550
4,6-Dinitro-2-methylphenol	ND		210	1	07/23/09 20:09	GY	5128550
4-Bromophenyl phenyl ether	ND		210	1	07/23/09 20:09	GY	5128550
4-Chloro-3-methylphenol	ND		210	1	07/23/09 20:09	GY	5128550
4-Chloroaniline	ND		210	1	07/23/09 20:09	GY	5128550
4-Chlorophenyl phenyl ether	ND		210	1	07/23/09 20:09	GY	5128550
4-Nitroaniline	ND		210	1	07/23/09 20:09	GY	5128550
4-Nitrophenol	ND		210	1	07/23/09 20:09	GY	5128550
Acenaphthene	ND		210	1	07/23/09 20:09	GY	5128550
Acenaphthylene	ND		210	1	07/23/09 20:09	GY	5128550
Aniline	ND		210	1	07/23/09 20:09	GY	5128550
Anthracene	ND		210	1	07/23/09 20:09	GY	5128550
Benz(a)anthracene	ND		210	1	07/23/09 20:09	GY	5128550
Benzo(a)pyrene	ND		210	1	07/23/09 20:09	GY	5128550
Benzo(b)fluoranthene	ND		210	1	07/23/09 20:09	GY	5128550
Benzo(g,h,i)perylene	ND		210	1	07/23/09 20:09	GY	5128550
Benzo(k)fluoranthene	ND		210	1	07/23/09 20:09	GY	5128550
Benzoic acid	ND		860	1	07/23/09 20:09	GY	5128550
Benzyl alcohol	ND		210	1	07/23/09 20:09	GY	5128550
Bis(2-chloroethoxy)methane	ND		210	1	07/23/09 20:09	GY	5128550
Bis(2-chloroethyl)ether	ND		210	1	07/23/09 20:09	GY	5128550

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 (15'4"-17'2")

Collected: 07/15/2009 9:35

SPL Sample ID: 09070987-01

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		210	1	07/23/09 20:09	GY	5128550
Bis(2-ethylhexyl)phthalate	ND		210	1	07/23/09 20:09	GY	5128550
Butyl benzyl phthalate	ND		210	1	07/23/09 20:09	GY	5128550
Carbazole	ND		210	1	07/23/09 20:09	GY	5128550
Chrysene	ND		210	1	07/23/09 20:09	GY	5128550
Dibenz(a,h)anthracene	ND		210	1	07/23/09 20:09	GY	5128550
Dibenzofuran	ND		210	1	07/23/09 20:09	GY	5128550
Diethyl phthalate	ND		210	1	07/23/09 20:09	GY	5128550
Dimethyl phthalate	ND		210	1	07/23/09 20:09	GY	5128550
Di-n-butyl phthalate	ND		210	1	07/23/09 20:09	GY	5128550
Di-n-octyl phthalate	ND		210	1	07/23/09 20:09	GY	5128550
Fluoranthene	ND		210	1	07/23/09 20:09	GY	5128550
Fluorene	ND		210	1	07/23/09 20:09	GY	5128550
Hexachlorobenzene	ND		210	1	07/23/09 20:09	GY	5128550
Hexachlorobutadiene	ND		210	1	07/23/09 20:09	GY	5128550
Hexachlorocyclopentadiene	ND		210	1	07/23/09 20:09	GY	5128550
Hexachloroethane	ND		210	1	07/23/09 20:09	GY	5128550
Indeno(1,2,3-cd)pyrene	ND		210	1	07/23/09 20:09	GY	5128550
Isophorone	ND		210	1	07/23/09 20:09	GY	5128550
Naphthalene	ND		210	1	07/23/09 20:09	GY	5128550
Nitrobenzene	ND		210	1	07/23/09 20:09	GY	5128550
N-Nitrosodi-n-propylamine	ND		210	1	07/23/09 20:09	GY	5128550
N-Nitrosodiphenylamine	ND		430	1	07/23/09 20:09	GY	5128550
Pentachlorophenol	ND		210	1	07/23/09 20:09	GY	5128550
Phenanthrene	ND		210	1	07/23/09 20:09	GY	5128550
Phenol	ND		210	1	07/23/09 20:09	GY	5128550
Pyrene	ND		210	1	07/23/09 20:09	GY	5128550
Pyridine	ND		210	1	07/23/09 20:09	GY	5128550
2-Methylphenol	ND		210	1	07/23/09 20:09	GY	5128550
3 & 4-Methylphenol	ND		430	1	07/23/09 20:09	GY	5128550
Surr: 2,4,6-Tribromophenol	82.8		% 19-135	1	07/23/09 20:09	GY	5128550
Surr: 2-Fluorobiphenyl	84.1		% 15-140	1	07/23/09 20:09	GY	5128550
Surr: 2-Fluorophenol	82.8		% 15-122	1	07/23/09 20:09	GY	5128550
Surr: Nitrobenzene-d5	83.5		% 10-134	1	07/23/09 20:09	GY	5128550
Surr: Phenol-d5	88.0		% 10-123	1	07/23/09 20:09	GY	5128550
Surr: Terphenyl-d14	82.9		% 18-166	1	07/23/09 20:09	GY	5128550

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	07/21/2009 15:01	QMT	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



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

Client Sample ID: MW-1 (15'4"-17'2")

Collected: 07/15/2009 9:35

SPL Sample ID: 09070987-01

Site: Rio Arriba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
TOTAL PETROLEUM HYDROCARBONS				MCL	E418.1	Units: mg/kg-dry	
Petroleum Hydrocarbons, TR	ND		13	1	07/21/09 14:27	LLL	5123352

Prep Method	Prep Date	Prep Initials	Prep Factor
	07/12/2009 10:22		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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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1 (15'4"-17'2")

Collected: 07/15/2009 9:35

SPL Sample ID: 09070987-01

Site: Rio Arriba County, 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		6.4	1	07/26/09 15:06	TLE	5130095
1,1,1-Trichloroethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,1,2,2-Tetrachloroethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,1,2-Trichloroethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,1-Dichloroethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,1-Dichloroethene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,1-Dichloropropene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2,3-Trichlorobenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2,3-Trichloropropane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2,4-Trichlorobenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2,4-Trimethylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2-Dibromo-3-chloropropane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2-Dibromoethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2-Dichlorobenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2-Dichloroethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2-Dichloropropane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,3,5-Trimethylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,3-Dichlorobenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,3-Dichloropropane	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,4-Dichlorobenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
2,2-Dichloropropane	ND		6.4	1	07/26/09 15:06	TLE	5130095
2-Butanone	ND		26	1	07/26/09 15:06	TLE	5130095
2-Chloroethyl vinyl ether	ND		13	1	07/26/09 15:06	TLE	5130095
2-Chlorotoluene	ND		6.4	1	07/26/09 15:06	TLE	5130095
2-Hexanone	ND		13	1	07/26/09 15:06	TLE	5130095
4-Chlorotoluene	ND		6.4	1	07/26/09 15:06	TLE	5130095
4-Isopropyltoluene	ND		6.4	1	07/26/09 15:06	TLE	5130095
4-Methyl-2-pentanone	ND		13	1	07/26/09 15:06	TLE	5130095
Acetone	ND		130	1	07/26/09 15:06	TLE	5130095
Acrylonitrile	ND		64	1	07/26/09 15:06	TLE	5130095
Benzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Bromobenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Bromochloromethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
Bromodichloromethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
Bromoform	ND		6.4	1	07/26/09 15:06	TLE	5130095
Bromomethane	ND		13	1	07/26/09 15:06	TLE	5130095
Carbon disulfide	ND		6.4	1	07/26/09 15:06	TLE	5130095
Carbon tetrachloride	ND		6.4	1	07/26/09 15:06	TLE	5130095
Chlorobenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095

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 (15'4"-17'2")

Collected: 07/15/2009 9:35

SPL Sample ID: 09070987-01

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		13	1	07/26/09 15:06	TLE	5130095
Chloroform	ND		6.4	1	07/26/09 15:06	TLE	5130095
Chloromethane	ND		13	1	07/26/09 15:06	TLE	5130095
Dibromochloromethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
Dibromomethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
Dichlorodifluoromethane	ND		13	1	07/26/09 15:06	TLE	5130095
Ethylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Hexachlorobutadiene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Isopropylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Methyl tert-butyl ether	ND		6.4	1	07/26/09 15:06	TLE	5130095
Methylene chloride	13		6.4	1	07/26/09 15:06	TLE	5130095
Naphthalene	ND		6.4	1	07/26/09 15:06	TLE	5130095
n-Butylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
n-Propylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
sec-Butylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Styrene	ND		6.4	1	07/26/09 15:06	TLE	5130095
tert-Butylbenzene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Tetrachloroethene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Toluene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Trichloroethene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Trichlorofluoromethane	ND		6.4	1	07/26/09 15:06	TLE	5130095
Vinyl acetate	ND		13	1	07/26/09 15:06	TLE	5130095
Vinyl chloride	ND		13	1	07/26/09 15:06	TLE	5130095
cis-1,2-Dichloroethene	ND		6.4	1	07/26/09 15:06	TLE	5130095
cis-1,3-Dichloropropene	ND		6.4	1	07/26/09 15:06	TLE	5130095
m,p-Xylene	ND		6.4	1	07/26/09 15:06	TLE	5130095
o-Xylene	ND		6.4	1	07/26/09 15:06	TLE	5130095
trans-1,2-Dichloroethene	ND		6.4	1	07/26/09 15:06	TLE	5130095
trans-1,3-Dichloropropene	ND		6.4	1	07/26/09 15:06	TLE	5130095
Xylenes, Total	ND		6.4	1	07/26/09 15:06	TLE	5130095
1,2-Dichloroethene (total)	ND		6.4	1	07/26/09 15:06	TLE	5130095
Surr: 1,2-Dichloroethane-d4	98.0		% 71-130	1	07/26/09 15:06	TLE	5130095
Surr: 4-Bromofluorobenzene	107		% 65-131	1	07/26/09 15:06	TLE	5130095
Surr: Toluene-d8	99.5		% 75-136	1	07/26/09 15:06	TLE	5130095

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	07/21/2009 14:43	XML	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-4 (18'-19')

Collected: 07/15/2009 11:50

SPL Sample ID: 09070987-02

Site: Rio Arriba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL				MCL	E310.1	Units: mg/Kg-dry	
Alkalinity, Total (As CaCO ₃)	590		22.7	1	07/22/09 9:30	PAC	5124587
ION CHROMATOGRAPHY				MCL	E300.0 MOD	Units: mg/kg-dry	
Bromide	ND		5.67	1	07/21/09 17:28	BDG	5127235
Chloride	ND		5.67	1	07/21/09 17:28	BDG	5127235
Fluoride	ND		5.67	1	07/21/09 17:28	BDG	5127235
Ortho-phosphate (As P)	ND		5.67	1	07/28/09 14:37	BDG	5132180
Sulfate	61.7		5.67	1	07/21/09 17:28	BDG	5127235
Nitrogen, Nitrate (As N)	ND		5.67	1	07/21/09 17:28	BDG	5127178
Nitrogen, Nitrite (As N)	ND		5.67	1	07/21/09 17:28	BDG	5127178
MERCURY, TOTAL				MCL	SW7471A	Units: mg/kg-dry	
Mercury	ND		0.034	1	07/21/09 16:30	F_S	5123706

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	07/21/2009 13:10	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/kg-dry	
Aluminum	6130		11.3	1	08/04/09 12:24	AB1	5141313
Boron	1.68		1.13	1	08/04/09 12:24	AB1	5141313
Calcium	4880		11.3	1	08/04/09 12:24	AB1	5141313
Iron	8870		1.13	1	08/04/09 12:24	AB1	5141313
Magnesium	1600		11.3	1	08/04/09 12:24	AB1	5141313
Potassium	948		56.7	1	08/04/09 12:24	AB1	5141313
Sodium	843		11.3	1	08/04/09 12:24	AB1	5141313
Strontium	36		0.34	1	08/04/09 12:24	AB1	5141313
Tin	0.646		0.567	1	08/04/09 12:24	AB1	5141313

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	07/23/2009 11:15	R_V	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

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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: MW-4 (18'-19')

Collected: 07/15/2009 11:50

SPL Sample ID: 09070987-02

Site: Rio Ariba County, 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		0.567	1	07/27/09 20:48	S_C	5132633
Arsenic	4.22		0.567	1	07/29/09 23:38	EG	5134470
Barium	178		0.567	1	07/29/09 23:38	EG	5134470
Beryllium	ND		0.454	1	07/27/09 20:48	S_C	5132633
Cadmium	ND		0.567	1	07/27/09 20:48	S_C	5132633
Chromium	6.78		0.567	1	07/28/09 19:33	S_C	5134062
Cobalt	3.83		0.567	1	07/27/09 20:48	S_C	5132633
Copper	8.46		0.567	1	07/29/09 23:38	EG	5134470
Lead	6.16		0.567	1	07/27/09 20:48	S_C	5132633
Manganese	226		0.567	1	07/27/09 20:48	S_C	5132633
Molybdenum	ND		0.567	1	07/27/09 20:48	S_C	5132633
Nickel	6.43		0.567	1	07/27/09 20:48	S_C	5132633
Selenium	ND		2.83	5	08/04/09 7:07	S_C	5140753
Silver	ND		0.567	1	07/27/09 20:48	S_C	5132633
Thallium	ND		0.567	1	07/27/09 20:48	S_C	5132633
Vanadium	15.2		0.567	1	07/29/09 23:38	EG	5134470
Zinc	21.7		1.13	1	07/29/09 23:38	EG	5134470

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	08/03/2009 12:30	R_V	1.00
SW3050B	07/23/2009 11:15	R_V	1.00

PERCENT MOISTURE			MCL	D2216	Units: wt%		
Percent Moisture	11.8		0	1	07/20/09 14:51	EB1	5121385

Qualifiers:

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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-4 (18'-19')

Collected: 07/15/2009 11:50

SPL Sample ID: 09070987-02

Site: Rio Ariba County, 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		190	1	07/23/09 20:40	GY	5128551
1,2-Dichlorobenzene	ND		190	1	07/23/09 20:40	GY	5128551
1,2-Diphenylhydrazine	ND		190	1	07/23/09 20:40	GY	5128551
1,3-Dichlorobenzene	ND		190	1	07/23/09 20:40	GY	5128551
1,4-Dichlorobenzene	ND		190	1	07/23/09 20:40	GY	5128551
2,4,5-Trichlorophenol	ND		190	1	07/23/09 20:40	GY	5128551
2,4,6-Trichlorophenol	ND		190	1	07/23/09 20:40	GY	5128551
2,4-Dichlorophenol	ND		190	1	07/23/09 20:40	GY	5128551
2,4-Dimethylphenol	ND		190	1	07/23/09 20:40	GY	5128551
2,4-Dinitrophenol	ND		190	1	07/23/09 20:40	GY	5128551
2,4-Dinitrotoluene	ND		190	1	07/23/09 20:40	GY	5128551
2,6-Dinitrotoluene	ND		190	1	07/23/09 20:40	GY	5128551
2-Chloronaphthalene	ND		190	1	07/23/09 20:40	GY	5128551
2-Chlorophenol	ND		190	1	07/23/09 20:40	GY	5128551
2-Methylnaphthalene	ND		190	1	07/23/09 20:40	GY	5128551
2-Nitroaniline	ND		190	1	07/23/09 20:40	GY	5128551
2-Nitrophenol	ND		190	1	07/23/09 20:40	GY	5128551
3,3'-Dichlorobenzidine	ND		190	1	07/23/09 20:40	GY	5128551
3-Nitroaniline	ND		190	1	07/23/09 20:40	GY	5128551
4,6-Dinitro-2-methylphenol	ND		190	1	07/23/09 20:40	GY	5128551
4-Bromophenyl phenyl ether	ND		190	1	07/23/09 20:40	GY	5128551
4-Chloro-3-methylphenol	ND		190	1	07/23/09 20:40	GY	5128551
4-Chloroaniline	ND		190	1	07/23/09 20:40	GY	5128551
4-Chlorophenyl phenyl ether	ND		190	1	07/23/09 20:40	GY	5128551
4-Nitroaniline	ND		190	1	07/23/09 20:40	GY	5128551
4-Nitrophenol	ND		190	1	07/23/09 20:40	GY	5128551
Acenaphthene	ND		190	1	07/23/09 20:40	GY	5128551
Acenaphthylene	ND		190	1	07/23/09 20:40	GY	5128551
Aniline	ND		190	1	07/23/09 20:40	GY	5128551
Anthracene	ND		190	1	07/23/09 20:40	GY	5128551
Benz(a)anthracene	ND		190	1	07/23/09 20:40	GY	5128551
Benzo(a)pyrene	ND		190	1	07/23/09 20:40	GY	5128551
Benzo(b)fluoranthene	ND		190	1	07/23/09 20:40	GY	5128551
Benzo(g,h,i)perylene	ND		190	1	07/23/09 20:40	GY	5128551
Benzo(k)fluoranthene	ND		190	1	07/23/09 20:40	GY	5128551
Benzoic acid	ND		760	1	07/23/09 20:40	GY	5128551
Benzyl alcohol	ND		190	1	07/23/09 20:40	GY	5128551
Bis(2-chloroethoxy)methane	ND		190	1	07/23/09 20:40	GY	5128551
Bis(2-chloroethyl)ether	ND		190	1	07/23/09 20:40	GY	5128551

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
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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 (18'-19')

Collected: 07/15/2009 11:50

SPL Sample ID: 09070987-02

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		190	1	07/23/09 20:40	GY	5128551
Bis(2-ethylhexyl)phthalate	ND		190	1	07/23/09 20:40	GY	5128551
Butyl benzyl phthalate	ND		190	1	07/23/09 20:40	GY	5128551
Carbazole	ND		190	1	07/23/09 20:40	GY	5128551
Chrysene	ND		190	1	07/23/09 20:40	GY	5128551
Dibenz(a,h)anthracene	ND		190	1	07/23/09 20:40	GY	5128551
Dibenzofuran	ND		190	1	07/23/09 20:40	GY	5128551
Diethyl phthalate	ND		190	1	07/23/09 20:40	GY	5128551
Dimethyl phthalate	ND		190	1	07/23/09 20:40	GY	5128551
Di-n-butyl phthalate	ND		190	1	07/23/09 20:40	GY	5128551
Di-n-octyl phthalate	ND		190	1	07/23/09 20:40	GY	5128551
Fluoranthene	ND		190	1	07/23/09 20:40	GY	5128551
Fluorene	ND		190	1	07/23/09 20:40	GY	5128551
Hexachlorobenzene	ND		190	1	07/23/09 20:40	GY	5128551
Hexachlorobutadiene	ND		190	1	07/23/09 20:40	GY	5128551
Hexachlorocyclopentadiene	ND		190	1	07/23/09 20:40	GY	5128551
Hexachloroethane	ND		190	1	07/23/09 20:40	GY	5128551
Indeno(1,2,3-cd)pyrene	ND		190	1	07/23/09 20:40	GY	5128551
Isophorone	ND		190	1	07/23/09 20:40	GY	5128551
Naphthalene	ND		190	1	07/23/09 20:40	GY	5128551
Nitrobenzene	ND		190	1	07/23/09 20:40	GY	5128551
N-Nitrosodi-n-propylamine	ND		190	1	07/23/09 20:40	GY	5128551
N-Nitrosodiphenylamine	ND		380	1	07/23/09 20:40	GY	5128551
Pentachlorophenol	ND		190	1	07/23/09 20:40	GY	5128551
Phenanthrene	ND		190	1	07/23/09 20:40	GY	5128551
Phenol	ND		190	1	07/23/09 20:40	GY	5128551
Pyrene	ND		190	1	07/23/09 20:40	GY	5128551
Pyridine	ND		190	1	07/23/09 20:40	GY	5128551
2-Methylphenol	ND		190	1	07/23/09 20:40	GY	5128551
3 & 4-Methylphenol	ND		380	1	07/23/09 20:40	GY	5128551
Surr: 2,4,6-Tribromophenol	66.8		% 19-135	1	07/23/09 20:40	GY	5128551
Surr: 2-Fluorobiphenyl	70.6		% 15-140	1	07/23/09 20:40	GY	5128551
Surr: 2-Fluorophenol	70.8		% 15-122	1	07/23/09 20:40	GY	5128551
Surr: Nitrobenzene-d5	67.6		% 10-134	1	07/23/09 20:40	GY	5128551
Surr: Phenol-d5	72.8		% 10-123	1	07/23/09 20:40	GY	5128551
Surr: Terphenyl-d14	65.3		% 18-166	1	07/23/09 20:40	GY	5128551

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	07/21/2009 15:01	QMT	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



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

Client Sample ID: MW-4 (18'-19')

Collected: 07/15/2009 11:50

SPL Sample ID: 09070987-02

Site: Rio Arriba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
TOTAL PETROLEUM HYDROCARBONS				MCL	E418.1	Units: mg/kg-dry	
Petroleum Hydrocarbons,TR	11		11	1	07/21/09 14:27	LLL	5123353

Prep Method	Prep Date	Prep Initials	Prep Factor
	07/12/2009 10:22		1.00

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-4 (18'-19')

Collected: 07/15/2009 11:50

SPL Sample ID: 09070987-02

Site: Rio Ariba County, 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		5.7	1	07/26/09 15:37	TLE	5130096
1,1,1-Trichloroethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,1,2,2-Tetrachloroethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,1,2-Trichloroethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,1-Dichloroethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,1-Dichloroethene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,1-Dichloropropene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2,3-Trichlorobenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2,3-Trichloropropane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2,4-Trichlorobenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2,4-Trimethylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2-Dibromo-3-chloropropane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2-Dibromoethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2-Dichlorobenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2-Dichloroethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2-Dichloropropane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,3,5-Trimethylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,3-Dichlorobenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,3-Dichloropropane	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,4-Dichlorobenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
2,2-Dichloropropane	ND		5.7	1	07/26/09 15:37	TLE	5130096
2-Butanone	ND		23	1	07/26/09 15:37	TLE	5130096
2-Chloroethyl vinyl ether	ND		11	1	07/26/09 15:37	TLE	5130096
2-Chlorotoluene	ND		5.7	1	07/26/09 15:37	TLE	5130096
2-Hexanone	ND		11	1	07/26/09 15:37	TLE	5130096
4-Chlorotoluene	ND		5.7	1	07/26/09 15:37	TLE	5130096
4-Isopropyltoluene	ND		5.7	1	07/26/09 15:37	TLE	5130096
4-Methyl-2-pentanone	ND		11	1	07/26/09 15:37	TLE	5130096
Acetone	ND		110	1	07/26/09 15:37	TLE	5130096
Acrylonitrile	ND		57	1	07/26/09 15:37	TLE	5130096
Benzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Bromobenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Bromochloromethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
Bromodichloromethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
Bromoform	ND		5.7	1	07/26/09 15:37	TLE	5130096
Bromomethane	ND		11	1	07/26/09 15:37	TLE	5130096
Carbon disulfide	ND		5.7	1	07/26/09 15:37	TLE	5130096
Carbon tetrachloride	ND		5.7	1	07/26/09 15:37	TLE	5130096
Chlorobenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096

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

>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 (18'-19')

Collected: 07/15/2009 11:50

SPL Sample ID: 09070987-02

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		11	1	07/26/09 15:37	TLE	5130096
Chloroform	ND		5.7	1	07/26/09 15:37	TLE	5130096
Chloromethane	ND		11	1	07/26/09 15:37	TLE	5130096
Dibromochloromethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
Dibromomethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
Dichlorodifluoromethane	ND		11	1	07/26/09 15:37	TLE	5130096
Ethylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Hexachlorobutadiene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Isopropylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Methyl tert-butyl ether	ND		5.7	1	07/26/09 15:37	TLE	5130096
Methylene chloride	ND		5.7	1	07/26/09 15:37	TLE	5130096
Naphthalene	ND		5.7	1	07/26/09 15:37	TLE	5130096
n-Butylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
n-Propylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
sec-Butylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Styrene	ND		5.7	1	07/26/09 15:37	TLE	5130096
tert-Butylbenzene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Tetrachloroethene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Toluene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Trichloroethene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Trichlorofluoromethane	ND		5.7	1	07/26/09 15:37	TLE	5130096
Vinyl acetate	ND		11	1	07/26/09 15:37	TLE	5130096
Vinyl chloride	ND		11	1	07/26/09 15:37	TLE	5130096
cis-1,2-Dichloroethene	ND		5.7	1	07/26/09 15:37	TLE	5130096
cis-1,3-Dichloropropene	ND		5.7	1	07/26/09 15:37	TLE	5130096
m,p-Xylene	ND		5.7	1	07/26/09 15:37	TLE	5130096
o-Xylene	ND		5.7	1	07/26/09 15:37	TLE	5130096
trans-1,2-Dichloroethene	ND		5.7	1	07/26/09 15:37	TLE	5130096
trans-1,3-Dichloropropene	ND		5.7	1	07/26/09 15:37	TLE	5130096
Xylenes, Total	ND		5.7	1	07/26/09 15:37	TLE	5130096
1,2-Dichloroethene (total)	ND		5.7	1	07/26/09 15:37	TLE	5130096
Surr: 1,2-Dichloroethane-d4	97.3		% 71-130	1	07/26/09 15:37	TLE	5130096
Surr: 4-Bromofluorobenzene	102		% 65-131	1	07/26/09 15:37	TLE	5130096
Surr: Toluene-d8	105		% 75-136	1	07/26/09 15:37	TLE	5130096

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	07/21/2009 12:45	XML	1.00

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

Client Sample ID: MW-3 (18'-20')

Collected: 07/15/2009 14:17 SPL Sample ID: 09070987-03

Site: Rio Arriba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL			MCL	E310.1	Units: mg/Kg-dry		
Alkalinity, Total (As CaCO ₃)	203		21.4	1	07/22/09 9:30	PAC	5124588
ION CHROMATOGRAPHY			MCL	E300.0 MOD	Units: mg/kg-dry		
Bromide	ND		5.34	1	07/21/09 17:45	BDG	5127236
Chloride	ND		5.34	1	07/21/09 17:45	BDG	5127236
Fluoride	ND		5.34	1	07/21/09 17:45	BDG	5127236
Ortho-phosphate (As P)	ND		5.34	1	07/28/09 14:54	BDG	5132184
Sulfate	28		5.34	1	07/21/09 17:45	BDG	5127236
Nitrogen, Nitrate (As N)	ND		5.34	1	07/21/09 17:45	BDG	5127179
Nitrogen, Nitrite (As N)	ND		5.34	1	07/21/09 17:45	BDG	5127179
MERCURY, TOTAL			MCL	SW7471A	Units: mg/kg-dry		
Mercury	ND		0.0321	1	07/21/09 16:32	F_S	5123707

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	07/21/2009 13:10	F_S	1.00

METALS BY METHOD 6010B, TOTAL			MCL	SW6010B	Units: mg/kg-dry		
Aluminum	3020		10.7	1	08/04/09 12:29	AB1	5141314
Boron	ND		1.07	1	08/04/09 12:29	AB1	5141314
Calcium	4940		10.7	1	08/04/09 12:29	AB1	5141314
Iron	4660		1.07	1	08/04/09 12:29	AB1	5141314
Magnesium	785		10.7	1	08/04/09 12:29	AB1	5141314
Potassium	415		53.4	1	08/04/09 12:29	AB1	5141314
Sodium	425		10.7	1	08/04/09 12:29	AB1	5141314
Strontium	16.1		0.321	1	08/04/09 12:29	AB1	5141314
Tin	ND		0.534	1	08/04/09 12:29	AB1	5141314

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	07/23/2009 11:15	R_V	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

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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: MW-3 (18'-20')

Collected: 07/15/2009 14:17

SPL Sample ID: 09070987-03

Site: Rio Ariba County, 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		0.534	1	07/27/09 20:53	S_C	5132634
Arsenic	1.94		0.534	1	07/29/09 23:44	EG	5134472
Barium	129		0.534	1	07/29/09 23:44	EG	5134472
Beryllium	ND		0.428	1	07/27/09 20:53	S_C	5132634
Cadmium	ND		0.534	1	07/27/09 20:53	S_C	5132634
Chromium	3.28		0.534	1	07/28/09 19:38	S_C	5134063
Cobalt	1.77		0.534	1	07/27/09 20:53	S_C	5132634
Copper	3.85		0.534	1	07/29/09 23:44	EG	5134472
Lead	2.81		0.534	1	07/27/09 20:53	S_C	5132634
Manganese	191		0.534	1	07/27/09 20:53	S_C	5132634
Molybdenum	ND		0.534	1	07/27/09 20:53	S_C	5132634
Nickel	3.08		0.534	1	07/27/09 20:53	S_C	5132634
Selenium	ND		0.534	1	08/04/09 7:12	S_C	5140754
Silver	ND		0.534	1	07/27/09 20:53	S_C	5132634
Thallium	ND		0.534	1	07/27/09 20:53	S_C	5132634
Vanadium	9.27		0.534	1	07/29/09 23:44	EG	5134472
Zinc	11.1		1.07	1	07/29/09 23:44	EG	5134472

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	08/03/2009 12:30	R_V	1.00
SW3050B	07/23/2009 11:15	R_V	1.00

PERCENT MOISTURE			MCL	D2216	Units: wt%		
Percent Moisture	6.44		0	1	07/20/09 14:51	EB1	5121384

Qualifiers:

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

Client Sample ID: MW-3 (18'-20')

Collected: 07/15/2009 14:17

SPL Sample ID: 09070987-03

Site: Rio Ariba County, 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		180	1	07/23/09 21:11	GY	5128552
1,2-Dichlorobenzene	ND		180	1	07/23/09 21:11	GY	5128552
1,2-Diphenylhydrazine	ND		180	1	07/23/09 21:11	GY	5128552
1,3-Dichlorobenzene	ND		180	1	07/23/09 21:11	GY	5128552
1,4-Dichlorobenzene	ND		180	1	07/23/09 21:11	GY	5128552
2,4,5-Trichlorophenol	ND		180	1	07/23/09 21:11	GY	5128552
2,4,6-Trichlorophenol	ND		180	1	07/23/09 21:11	GY	5128552
2,4-Dichlorophenol	ND		180	1	07/23/09 21:11	GY	5128552
2,4-Dimethylphenol	ND		180	1	07/23/09 21:11	GY	5128552
2,4-Dinitrophenol	ND		180	1	07/23/09 21:11	GY	5128552
2,4-Dinitrotoluene	ND		180	1	07/23/09 21:11	GY	5128552
2,6-Dinitrotoluene	ND		180	1	07/23/09 21:11	GY	5128552
2-Chloronaphthalene	ND		180	1	07/23/09 21:11	GY	5128552
2-Chlorophenol	ND		180	1	07/23/09 21:11	GY	5128552
2-Methylnaphthalene	ND		180	1	07/23/09 21:11	GY	5128552
2-Nitroaniline	ND		180	1	07/23/09 21:11	GY	5128552
2-Nitrophenol	ND		180	1	07/23/09 21:11	GY	5128552
3,3'-Dichlorobenzidine	ND		180	1	07/23/09 21:11	GY	5128552
3-Nitroaniline	ND		180	1	07/23/09 21:11	GY	5128552
4,6-Dinitro-2-methylphenol	ND		180	1	07/23/09 21:11	GY	5128552
4-Bromophenyl phenyl ether	ND		180	1	07/23/09 21:11	GY	5128552
4-Chloro-3-methylphenol	ND		180	1	07/23/09 21:11	GY	5128552
4-Chloroaniline	ND		180	1	07/23/09 21:11	GY	5128552
4-Chlorophenyl phenyl ether	ND		180	1	07/23/09 21:11	GY	5128552
4-Nitroaniline	ND		180	1	07/23/09 21:11	GY	5128552
4-Nitrophenol	ND		180	1	07/23/09 21:11	GY	5128552
Acenaphthene	ND		180	1	07/23/09 21:11	GY	5128552
Acenaphthylene	ND		180	1	07/23/09 21:11	GY	5128552
Aniline	ND		180	1	07/23/09 21:11	GY	5128552
Anthracene	ND		180	1	07/23/09 21:11	GY	5128552
Benz(a)anthracene	ND		180	1	07/23/09 21:11	GY	5128552
Benzo(a)pyrene	ND		180	1	07/23/09 21:11	GY	5128552
Benzo(b)fluoranthene	ND		180	1	07/23/09 21:11	GY	5128552
Benzo(g,h,i)perylene	ND		180	1	07/23/09 21:11	GY	5128552
Benzo(k)fluoranthene	ND		180	1	07/23/09 21:11	GY	5128552
Benzoic acid	ND		710	1	07/23/09 21:11	GY	5128552
Benzyl alcohol	ND		180	1	07/23/09 21:11	GY	5128552
Bis(2-chloroethoxy)methane	ND		180	1	07/23/09 21:11	GY	5128552
Bis(2-chloroethyl)ether	ND		180	1	07/23/09 21:11	GY	5128552

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-3 (18'-20')

Collected: 07/15/2009 14:17

SPL Sample ID: 09070987-03

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		180	1	07/23/09 21:11	GY	5128552
Bis(2-ethylhexyl)phthalate	ND		180	1	07/23/09 21:11	GY	5128552
Butyl benzyl phthalate	ND		180	1	07/23/09 21:11	GY	5128552
Carbazole	ND		180	1	07/23/09 21:11	GY	5128552
Chrysene	ND		180	1	07/23/09 21:11	GY	5128552
Dibenz(a,h)anthracene	ND		180	1	07/23/09 21:11	GY	5128552
Dibenzofuran	ND		180	1	07/23/09 21:11	GY	5128552
Diethyl phthalate	ND		180	1	07/23/09 21:11	GY	5128552
Dimethyl phthalate	ND		180	1	07/23/09 21:11	GY	5128552
Di-n-butyl phthalate	ND		180	1	07/23/09 21:11	GY	5128552
Di-n-octyl phthalate	ND		180	1	07/23/09 21:11	GY	5128552
Fluoranthene	ND		180	1	07/23/09 21:11	GY	5128552
Fluorene	ND		180	1	07/23/09 21:11	GY	5128552
Hexachlorobenzene	ND		180	1	07/23/09 21:11	GY	5128552
Hexachlorobutadiene	ND		180	1	07/23/09 21:11	GY	5128552
Hexachlorocyclopentadiene	ND		180	1	07/23/09 21:11	GY	5128552
Hexachloroethane	ND		180	1	07/23/09 21:11	GY	5128552
Indeno(1,2,3-cd)pyrene	ND		180	1	07/23/09 21:11	GY	5128552
Isophorone	ND		180	1	07/23/09 21:11	GY	5128552
Naphthalene	ND		180	1	07/23/09 21:11	GY	5128552
Nitrobenzene	ND		180	1	07/23/09 21:11	GY	5128552
N-Nitrosodi-n-propylamine	ND		180	1	07/23/09 21:11	GY	5128552
N-Nitrosodiphenylamine	ND		360	1	07/23/09 21:11	GY	5128552
Pentachlorophenol	ND		180	1	07/23/09 21:11	GY	5128552
Phenanthrene	ND		180	1	07/23/09 21:11	GY	5128552
Phenol	ND		180	1	07/23/09 21:11	GY	5128552
Pyrene	ND		180	1	07/23/09 21:11	GY	5128552
Pyridine	ND		180	1	07/23/09 21:11	GY	5128552
2-Methylphenol	ND		180	1	07/23/09 21:11	GY	5128552
3 & 4-Methylphenol	ND		360	1	07/23/09 21:11	GY	5128552
Surr: 2,4,6-Tribromophenol	83.6		% 19-135	1	07/23/09 21:11	GY	5128552
Surr: 2-Fluorobiphenyl	89.4		% 15-140	1	07/23/09 21:11	GY	5128552
Surr: 2-Fluorophenol	84.0		% 15-122	1	07/23/09 21:11	GY	5128552
Surr: Nitrobenzene-d5	85.9		% 10-134	1	07/23/09 21:11	GY	5128552
Surr: Phenol-d5	89.2		% 10-123	1	07/23/09 21:11	GY	5128552
Surr: Terphenyl-d14	82.9		% 18-166	1	07/23/09 21:11	GY	5128552

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	07/21/2009 15:01	QMT	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



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

Client Sample ID: MW-3 (18'-20')

Collected: 07/15/2009 14:17 SPL Sample ID: 09070987-03

Site: Rio Arriba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
TOTAL PETROLEUM HYDROCARBONS				MCL	E418.1	Units: mg/kg-dry	
Petroleum Hydrocarbons, TR	ND		11	1	07/21/09 14:27	LLL	5123354

Prep Method	Prep Date	Prep Initials	Prep Factor
	07/12/2009 10:22		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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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-3 (18'-20')

Collected: 07/15/2009 14:17

SPL Sample ID: 09070987-03

Site: Rio Ariba County, 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		5.3	1	07/26/09 13:33	TLE	5130092
1,1,1-Trichloroethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,1,2,2-Tetrachloroethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,1,2-Trichloroethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,1-Dichloroethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,1-Dichloroethene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,1-Dichloropropene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2,3-Trichlorobenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2,3-Trichloropropane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2,4-Trichlorobenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2,4-Trimethylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2-Dibromo-3-chloropropane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2-Dibromoethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2-Dichlorobenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2-Dichloroethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2-Dichloropropane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,3,5-Trimethylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,3-Dichlorobenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,3-Dichloropropane	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,4-Dichlorobenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
2,2-Dichloropropane	ND		5.3	1	07/26/09 13:33	TLE	5130092
2-Butanone	ND		21	1	07/26/09 13:33	TLE	5130092
2-Chloroethyl vinyl ether	ND		11	1	07/26/09 13:33	TLE	5130092
2-Chlorotoluene	ND		5.3	1	07/26/09 13:33	TLE	5130092
2-Hexanone	ND		11	1	07/26/09 13:33	TLE	5130092
4-Chlorotoluene	ND		5.3	1	07/26/09 13:33	TLE	5130092
4-Isopropyltoluene	ND		5.3	1	07/26/09 13:33	TLE	5130092
4-Methyl-2-pentanone	ND		11	1	07/26/09 13:33	TLE	5130092
Acetone	ND		110	1	07/26/09 13:33	TLE	5130092
Acrylonitrile	ND		53	1	07/26/09 13:33	TLE	5130092
Benzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Bromobenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Bromochloromethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
Bromodichloromethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
Bromoform	ND		5.3	1	07/26/09 13:33	TLE	5130092
Bromomethane	ND		11	1	07/26/09 13:33	TLE	5130092
Carbon disulfide	ND		5.3	1	07/26/09 13:33	TLE	5130092
Carbon tetrachloride	ND		5.3	1	07/26/09 13:33	TLE	5130092
Chlorobenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092

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 (18'-20')

Collected: 07/15/2009 14:17

SPL Sample ID: 09070987-03

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		11	1	07/26/09 13:33	TLE	5130092
Chloroform	ND		5.3	1	07/26/09 13:33	TLE	5130092
Chloromethane	ND		11	1	07/26/09 13:33	TLE	5130092
Dibromochloromethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
Dibromomethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
Dichlorodifluoromethane	ND		11	1	07/26/09 13:33	TLE	5130092
Ethylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Hexachlorobutadiene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Isopropylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Methyl tert-butyl ether	ND		5.3	1	07/26/09 13:33	TLE	5130092
Methylene chloride	ND		5.3	1	07/26/09 13:33	TLE	5130092
Naphthalene	ND		5.3	1	07/26/09 13:33	TLE	5130092
n-Butylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
n-Propylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
sec-Butylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Styrene	ND		5.3	1	07/26/09 13:33	TLE	5130092
tert-Butylbenzene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Tetrachloroethene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Toluene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Trichloroethene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Trichlorofluoromethane	ND		5.3	1	07/26/09 13:33	TLE	5130092
Vinyl acetate	ND		11	1	07/26/09 13:33	TLE	5130092
Vinyl chloride	ND		11	1	07/26/09 13:33	TLE	5130092
cis-1,2-Dichloroethene	ND		5.3	1	07/26/09 13:33	TLE	5130092
cis-1,3-Dichloropropene	ND		5.3	1	07/26/09 13:33	TLE	5130092
m,p-Xylene	ND		5.3	1	07/26/09 13:33	TLE	5130092
o-Xylene	ND		5.3	1	07/26/09 13:33	TLE	5130092
trans-1,2-Dichloroethene	ND		5.3	1	07/26/09 13:33	TLE	5130092
trans-1,3-Dichloropropene	ND		5.3	1	07/26/09 13:33	TLE	5130092
Xylenes, Total	ND		5.3	1	07/26/09 13:33	TLE	5130092
1,2-Dichloroethene (total)	ND		5.3	1	07/26/09 13:33	TLE	5130092
Surr: 1,2-Dichloroethane-d4	96.4		% 71-130	1	07/26/09 13:33	TLE	5130092
Surr: 4-Bromofluorobenzene	101		% 65-131	1	07/26/09 13:33	TLE	5130092
Surr: Toluene-d8	104		% 75-136	1	07/26/09 13:33	TLE	5130092

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	07/21/2009 12:33	XML	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

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MI - Matrix Interference



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

Client Sample ID: MW-2 (18'-19.5')

Collected: 07/16/2009 9:17

SPL Sample ID: 09070987-04

Site: Rio Arriba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL				MCL	E310.1	Units: mg/Kg-dry	
Alkalinity, Total (As CaCO ₃)	470		25.4	1	07/22/09 9:30	PAC	5124589
ION CHROMATOGRAPHY				MCL	E300.0 MOD	Units: mg/kg-dry	
Bromide	ND		6.35	1	07/21/09 18:02	BDG	5127237
Chloride	ND		6.35	1	07/21/09 18:02	BDG	5127237
Fluoride	ND		6.35	1	07/21/09 18:02	BDG	5127237
Ortho-phosphate (As P)	ND		6.35	1	07/28/09 15:11	BDG	5132185
Sulfate	103		6.35	1	07/21/09 18:02	BDG	5127237
Nitrogen, Nitrate (As N)	ND		6.35	1	07/21/09 18:02	BDG	5127180
Nitrogen, Nitrite (As N)	ND		6.35	1	07/21/09 18:02	BDG	5127180
MERCURY, TOTAL				MCL	SW7471A	Units: mg/kg-dry	
Mercury	ND		0.0381	1	07/21/09 16:34	F_S	5123708

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	07/21/2009 13:10	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/kg-dry	
Aluminum	11300		12.7	1	08/04/09 12:34	AB1	5141433
Boron	2.53		1.27	1	08/04/09 12:34	AB1	5141433
Calcium	7750		12.7	1	08/04/09 12:34	AB1	5141433
Iron	15200		1.27	1	08/04/09 12:34	AB1	5141433
Magnesium	3470		12.7	1	08/04/09 12:34	AB1	5141433
Potassium	1720		63.5	1	08/04/09 12:34	AB1	5141433
Sodium	800		12.7	1	08/04/09 12:34	AB1	5141433
Strontium	66.2		0.381	1	08/04/09 12:34	AB1	5141433
Tin	0.825		0.635	1	08/04/09 12:34	AB1	5141433

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	07/23/2009 11:15	R_V	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



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

Client Sample ID: MW-2 (18'-19.5')

Collected: 07/16/2009 9:17

SPL Sample ID: 09070987-04

Site: Rio Ariba County, 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		0.635	1	07/27/09 20:58	S_C	5132635
Arsenic	3.43		0.635	1	07/29/09 23:49	EG	5134473
Barium	274		0.635	1	07/29/09 23:49	EG	5134473
Beryllium	0.696		0.508	1	07/27/09 20:58	S_C	5132635
Cadmium	ND		0.635	1	07/27/09 20:58	S_C	5132635
Chromium	14		0.635	1	07/28/09 19:42	S_C	5134064
Cobalt	7.31		0.635	1	07/27/09 20:58	S_C	5132635
Copper	15.6		0.635	1	07/29/09 23:49	EG	5134473
Lead	8.87		0.635	1	07/28/09 19:42	S_C	5134064
Manganese	373		0.635	1	07/27/09 20:58	S_C	5132635
Molybdenum	ND		0.635	1	07/27/09 20:58	S_C	5132635
Nickel	11.5		0.635	1	07/27/09 20:58	S_C	5132635
Selenium	ND		3.17	5	08/04/09 7:17	S_C	5140755
Silver	ND		0.635	1	07/27/09 20:58	S_C	5132635
Thallium	ND		0.635	1	07/28/09 19:42	S_C	5134064
Vanadium	24.9		0.635	1	07/29/09 23:49	EG	5134473
Zinc	43.2		1.27	1	07/29/09 23:49	EG	5134473

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	08/03/2009 12:30	R_V	1.00
SW3050B	07/23/2009 11:15	R_V	1.00

PERCENT MOISTURE			MCL	D2216	Units: wt%		
Percent Moisture	21.2		0	1	07/20/09 14:51	EB1	5121383

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 (18'-19.5')

Collected: 07/16/2009 9:17

SPL Sample ID: 09070987-04

Site: Rio Ariba County, 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		210	1	07/23/09 21:42	GY	5128553
1,2-Dichlorobenzene	ND		210	1	07/23/09 21:42	GY	5128553
1,2-Diphenylhydrazine	ND		210	1	07/23/09 21:42	GY	5128553
1,3-Dichlorobenzene	ND		210	1	07/23/09 21:42	GY	5128553
1,4-Dichlorobenzene	ND		210	1	07/23/09 21:42	GY	5128553
2,4,5-Trichlorophenol	ND		210	1	07/23/09 21:42	GY	5128553
2,4,6-Trichlorophenol	ND		210	1	07/23/09 21:42	GY	5128553
2,4-Dichlorophenol	ND		210	1	07/23/09 21:42	GY	5128553
2,4-Dimethylphenol	ND		210	1	07/23/09 21:42	GY	5128553
2,4-Dinitrophenol	ND		210	1	07/23/09 21:42	GY	5128553
2,4-Dinitrotoluene	ND		210	1	07/23/09 21:42	GY	5128553
2,6-Dinitrotoluene	ND		210	1	07/23/09 21:42	GY	5128553
2-Chloronaphthalene	ND		210	1	07/23/09 21:42	GY	5128553
2-Chlorophenol	ND		210	1	07/23/09 21:42	GY	5128553
2-Methylnaphthalene	ND		210	1	07/23/09 21:42	GY	5128553
2-Nitroaniline	ND		210	1	07/23/09 21:42	GY	5128553
2-Nitrophenol	ND		210	1	07/23/09 21:42	GY	5128553
3,3'-Dichlorobenzidine	ND		210	1	07/23/09 21:42	GY	5128553
3-Nitroaniline	ND		210	1	07/23/09 21:42	GY	5128553
4,6-Dinitro-2-methylphenol	ND		210	1	07/23/09 21:42	GY	5128553
4-Bromophenyl phenyl ether	ND		210	1	07/23/09 21:42	GY	5128553
4-Chloro-3-methylphenol	ND		210	1	07/23/09 21:42	GY	5128553
4-Chloroaniline	ND		210	1	07/23/09 21:42	GY	5128553
4-Chlorophenyl phenyl ether	ND		210	1	07/23/09 21:42	GY	5128553
4-Nitroaniline	ND		210	1	07/23/09 21:42	GY	5128553
4-Nitrophenol	ND		210	1	07/23/09 21:42	GY	5128553
Acenaphthene	ND		210	1	07/23/09 21:42	GY	5128553
Acenaphthylene	ND		210	1	07/23/09 21:42	GY	5128553
Aniline	ND		210	1	07/23/09 21:42	GY	5128553
Anthracene	ND		210	1	07/23/09 21:42	GY	5128553
Benz(a)anthracene	ND		210	1	07/23/09 21:42	GY	5128553
Benzo(a)pyrene	ND		210	1	07/23/09 21:42	GY	5128553
Benzo(b)fluoranthene	ND		210	1	07/23/09 21:42	GY	5128553
Benzo(g,h,i)perylene	ND		210	1	07/23/09 21:42	GY	5128553
Benzo(k)fluoranthene	ND		210	1	07/23/09 21:42	GY	5128553
Benzoic acid	ND		850	1	07/23/09 21:42	GY	5128553
Benzyl alcohol	ND		210	1	07/23/09 21:42	GY	5128553
Bis(2-chloroethoxy)methane	ND		210	1	07/23/09 21:42	GY	5128553
Bis(2-chloroethyl)ether	ND		210	1	07/23/09 21:42	GY	5128553

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 (18'-19.5')

Collected: 07/16/2009 9:17

SPL Sample ID: 09070987-04

Site: Rio Arriba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		210	1	07/23/09 21:42	GY	5128553
Bis(2-ethylhexyl)phthalate	ND		210	1	07/23/09 21:42	GY	5128553
Butyl benzyl phthalate	ND		210	1	07/23/09 21:42	GY	5128553
Carbazole	ND		210	1	07/23/09 21:42	GY	5128553
Chrysene	ND		210	1	07/23/09 21:42	GY	5128553
Dibenz(a,h)anthracene	ND		210	1	07/23/09 21:42	GY	5128553
Dibenzofuran	ND		210	1	07/23/09 21:42	GY	5128553
Diethyl phthalate	ND		210	1	07/23/09 21:42	GY	5128553
Dimethyl phthalate	ND		210	1	07/23/09 21:42	GY	5128553
Di-n-butyl phthalate	ND		210	1	07/23/09 21:42	GY	5128553
Di-n-octyl phthalate	ND		210	1	07/23/09 21:42	GY	5128553
Fluoranthene	ND		210	1	07/23/09 21:42	GY	5128553
Fluorene	ND		210	1	07/23/09 21:42	GY	5128553
Hexachlorobenzene	ND		210	1	07/23/09 21:42	GY	5128553
Hexachlorobutadiene	ND		210	1	07/23/09 21:42	GY	5128553
Hexachlorocyclopentadiene	ND		210	1	07/23/09 21:42	GY	5128553
Hexachloroethane	ND		210	1	07/23/09 21:42	GY	5128553
Indeno(1,2,3-cd)pyrene	ND		210	1	07/23/09 21:42	GY	5128553
Isophorone	ND		210	1	07/23/09 21:42	GY	5128553
Naphthalene	ND		210	1	07/23/09 21:42	GY	5128553
Nitrobenzene	ND		210	1	07/23/09 21:42	GY	5128553
N-Nitrosodi-n-propylamine	ND		210	1	07/23/09 21:42	GY	5128553
N-Nitrosodiphenylamine	ND		420	1	07/23/09 21:42	GY	5128553
Pentachlorophenol	ND		210	1	07/23/09 21:42	GY	5128553
Phenanthrene	ND		210	1	07/23/09 21:42	GY	5128553
Phenol	ND		210	1	07/23/09 21:42	GY	5128553
Pyrene	ND		210	1	07/23/09 21:42	GY	5128553
Pyridine	ND		210	1	07/23/09 21:42	GY	5128553
2-Methylphenol	ND		210	1	07/23/09 21:42	GY	5128553
3 & 4-Methylphenol	ND		420	1	07/23/09 21:42	GY	5128553
Surr: 2,4,6-Tribromophenol	70.8		% 19-135	1	07/23/09 21:42	GY	5128553
Surr: 2-Fluorobiphenyl	74.7		% 15-140	1	07/23/09 21:42	GY	5128553
Surr: 2-Fluorophenol	75.2		% 15-122	1	07/23/09 21:42	GY	5128553
Surr: Nitrobenzene-d5	75.3		% 10-134	1	07/23/09 21:42	GY	5128553
Surr: Phenol-d5	77.6		% 10-123	1	07/23/09 21:42	GY	5128553
Surr: Terphenyl-d14	70.6		% 18-166	1	07/23/09 21:42	GY	5128553

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	07/21/2009 15:01	QMT	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



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

Client Sample ID: MW-2 (18'-19.5')

Collected: 07/16/2009 9:17

SPL Sample ID: 09070987-04

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
TOTAL PETROLEUM HYDROCARBONS				MCL	E418.1	Units: mg/kg-dry	
Petroleum Hydrocarbons, TR	ND		13	1	07/21/09 14:27	LLL	5123355

Prep Method	Prep Date	Prep Initials	Prep Factor
	07/12/2009 10:22		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



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

Client Sample ID: MW-2 (18'-19.5')

Collected: 07/16/2009 9:17

SPL Sample ID: 09070987-04

Site: Rio Ariba County, 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		6.3	1	07/26/09 16:08	TLE	5130097
1,1,1-Trichloroethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,1,2,2-Tetrachloroethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,1,2-Trichloroethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,1-Dichloroethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,1-Dichloroethene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,1-Dichloropropene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2,3-Trichlorobenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2,3-Trichloropropane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2,4-Trichlorobenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2,4-Trimethylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2-Dibromo-3-chloropropane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2-Dibromoethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2-Dichlorobenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2-Dichloroethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2-Dichloropropane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,3,5-Trimethylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,3-Dichlorobenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,3-Dichloropropane	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,4-Dichlorobenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
2,2-Dichloropropane	ND		6.3	1	07/26/09 16:08	TLE	5130097
2-Butanone	ND		25	1	07/26/09 16:08	TLE	5130097
2-Chloroethyl vinyl ether	ND		13	1	07/26/09 16:08	TLE	5130097
2-Chlorotoluene	ND		6.3	1	07/26/09 16:08	TLE	5130097
2-Hexanone	ND		13	1	07/26/09 16:08	TLE	5130097
4-Chlorotoluene	ND		6.3	1	07/26/09 16:08	TLE	5130097
4-Isopropyltoluene	ND		6.3	1	07/26/09 16:08	TLE	5130097
4-Methyl-2-pentanone	ND		13	1	07/26/09 16:08	TLE	5130097
Acetone	ND		130	1	07/26/09 16:08	TLE	5130097
Acrylonitrile	ND		63	1	07/26/09 16:08	TLE	5130097
Benzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Bromobenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Bromochloromethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
Bromodichloromethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
Bromoform	ND		6.3	1	07/26/09 16:08	TLE	5130097
Bromomethane	ND		13	1	07/26/09 16:08	TLE	5130097
Carbon disulfide	ND		6.3	1	07/26/09 16:08	TLE	5130097
Carbon tetrachloride	ND		6.3	1	07/26/09 16:08	TLE	5130097
Chlorobenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097

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 (18'-19.5')

Collected: 07/16/2009 9:17

SPL Sample ID: 09070987-04

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		13	1	07/26/09 16:08	TLE	5130097
Chloroform	ND		6.3	1	07/26/09 16:08	TLE	5130097
Chloromethane	ND		13	1	07/26/09 16:08	TLE	5130097
Dibromochloromethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
Dibromomethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
Dichlorodifluoromethane	ND		13	1	07/26/09 16:08	TLE	5130097
Ethylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Hexachlorobutadiene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Isopropylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Methyl tert-butyl ether	ND		6.3	1	07/26/09 16:08	TLE	5130097
Methylene chloride	ND		6.3	1	07/26/09 16:08	TLE	5130097
Naphthalene	ND		6.3	1	07/26/09 16:08	TLE	5130097
n-Butylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
n-Propylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
sec-Butylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Styrene	ND		6.3	1	07/26/09 16:08	TLE	5130097
tert-Butylbenzene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Tetrachloroethene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Toluene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Trichloroethene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Trichlorofluoromethane	ND		6.3	1	07/26/09 16:08	TLE	5130097
Vinyl acetate	ND		13	1	07/26/09 16:08	TLE	5130097
Vinyl chloride	ND		13	1	07/26/09 16:08	TLE	5130097
cis-1,2-Dichloroethene	ND		6.3	1	07/26/09 16:08	TLE	5130097
cis-1,3-Dichloropropene	ND		6.3	1	07/26/09 16:08	TLE	5130097
m,p-Xylene	ND		6.3	1	07/26/09 16:08	TLE	5130097
o-Xylene	ND		6.3	1	07/26/09 16:08	TLE	5130097
trans-1,2-Dichloroethene	ND		6.3	1	07/26/09 16:08	TLE	5130097
trans-1,3-Dichloropropene	ND		6.3	1	07/26/09 16:08	TLE	5130097
Xylenes, Total	ND		6.3	1	07/26/09 16:08	TLE	5130097
1,2-Dichloroethene (total)	ND		6.3	1	07/26/09 16:08	TLE	5130097
Surr: 1,2-Dichloroethane-d4	98.2		% 71-130	1	07/26/09 16:08	TLE	5130097
Surr: 4-Bromofluorobenzene	101		% 65-131	1	07/26/09 16:08	TLE	5130097
Surr: Toluene-d8	104		% 75-136	1	07/26/09 16:08	TLE	5130097

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	07/21/2009 12:34	XML	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



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

Client Sample ID: Trip Blank

Collected: 07/17/2009 12:30

SPL Sample ID: 09070987-05

Site: Rio Arriba County, 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	07/23/09 4:36	JC	5127278
1,1,1-Trichloroethane	ND		5	1	07/23/09 4:36	JC	5127278
1,1,2,2-Tetrachloroethane	ND		5	1	07/23/09 4:36	JC	5127278
1,1,2-Trichloroethane	ND		5	1	07/23/09 4:36	JC	5127278
1,1-Dichloroethane	ND		5	1	07/23/09 4:36	JC	5127278
1,1-Dichloroethene	ND		5	1	07/23/09 4:36	JC	5127278
1,1-Dichloropropene	ND		5	1	07/23/09 4:36	JC	5127278
1,2,3-Trichlorobenzene	ND		5	1	07/23/09 4:36	JC	5127278
1,2,3-Trichloropropane	ND		5	1	07/23/09 4:36	JC	5127278
1,2,4-Trichlorobenzene	ND		5	1	07/23/09 4:36	JC	5127278
1,2,4-Trimethylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
1,2-Dibromo-3-chloropropane	ND		5	1	07/23/09 4:36	JC	5127278
1,2-Dibromoethane	ND		5	1	07/23/09 4:36	JC	5127278
1,2-Dichlorobenzene	ND		5	1	07/23/09 4:36	JC	5127278
1,2-Dichloroethane	ND		5	1	07/23/09 4:36	JC	5127278
1,2-Dichloropropane	ND		5	1	07/23/09 4:36	JC	5127278
1,3,5-Trimethylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
1,3-Dichlorobenzene	ND		5	1	07/23/09 4:36	JC	5127278
1,3-Dichloropropane	ND		5	1	07/23/09 4:36	JC	5127278
1,4-Dichlorobenzene	ND		5	1	07/23/09 4:36	JC	5127278
2,2-Dichloropropane	ND		5	1	07/23/09 4:36	JC	5127278
2-Butanone	ND		20	1	07/23/09 4:36	JC	5127278
2-Chloroethyl vinyl ether	ND J		10	1	07/23/09 4:36	JC	5127278
2-Chlorotoluene	ND		5	1	07/23/09 4:36	JC	5127278
2-Hexanone	ND		10	1	07/23/09 4:36	JC	5127278
4-Chlorotoluene	ND		5	1	07/23/09 4:36	JC	5127278
4-Isopropyltoluene	ND		5	1	07/23/09 4:36	JC	5127278
4-Methyl-2-pentanone	ND		10	1	07/23/09 4:36	JC	5127278
Acetone	ND		20	1	07/23/09 4:36	JC	5127278
Acrylonitrile	ND		10	1	07/23/09 4:36	JC	5127278
Benzene	ND		5	1	07/23/09 4:36	JC	5127278
Bromobenzene	ND		5	1	07/23/09 4:36	JC	5127278
Bromochloromethane	ND		5	1	07/23/09 4:36	JC	5127278
Bromodichloromethane	ND		5	1	07/23/09 4:36	JC	5127278
Bromoform	ND		5	1	07/23/09 4:36	JC	5127278
Bromomethane	ND		10	1	07/23/09 4:36	JC	5127278
Carbon disulfide	ND		5	1	07/23/09 4:36	JC	5127278
Carbon tetrachloride	ND		5	1	07/23/09 4:36	JC	5127278
Chlorobenzene	ND		5	1	07/23/09 4:36	JC	5127278

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: Trip Blank

Collected: 07/17/2009 12:30

SPL Sample ID: 09070987-05

Site: Rio Ariba County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	07/23/09 4:36	JC	5127278
Chloroform	ND		5	1	07/23/09 4:36	JC	5127278
Chloromethane	ND		10	1	07/23/09 4:36	JC	5127278
Dibromochloromethane	ND		5	1	07/23/09 4:36	JC	5127278
Dibromomethane	ND		5	1	07/23/09 4:36	JC	5127278
Dichlorodifluoromethane	ND		10	1	07/23/09 4:36	JC	5127278
Ethylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
Hexachlorobutadiene	ND		5	1	07/23/09 4:36	JC	5127278
Isopropylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
Methyl tert-butyl ether	ND		5	1	07/23/09 4:36	JC	5127278
Methylene chloride	ND		5	1	07/23/09 4:36	JC	5127278
Naphthalene	ND		5	1	07/23/09 4:36	JC	5127278
n-Butylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
n-Propylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
sec-Butylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
Styrene	ND		5	1	07/23/09 4:36	JC	5127278
tert-Butylbenzene	ND		5	1	07/23/09 4:36	JC	5127278
Tetrachloroethene	ND		5	1	07/23/09 4:36	JC	5127278
Toluene	ND		5	1	07/23/09 4:36	JC	5127278
Trichloroethene	ND		5	1	07/23/09 4:36	JC	5127278
Trichlorofluoromethane	ND		5	1	07/23/09 4:36	JC	5127278
Vinyl acetate	ND		10	1	07/23/09 4:36	JC	5127278
Vinyl chloride	ND		2	1	07/23/09 4:36	JC	5127278
cis-1,2-Dichloroethene	ND		5	1	07/23/09 4:36	JC	5127278
cis-1,3-Dichloropropene	ND		5	1	07/23/09 4:36	JC	5127278
m,p-Xylene	ND		5	1	07/23/09 4:36	JC	5127278
o-Xylene	ND		5	1	07/23/09 4:36	JC	5127278
trans-1,2-Dichloroethene	ND		5	1	07/23/09 4:36	JC	5127278
trans-1,3-Dichloropropene	ND		5	1	07/23/09 4:36	JC	5127278
1,2-Dichloroethene (total)	ND		5	1	07/23/09 4:36	JC	5127278
Xylenes, Total	ND		5	1	07/23/09 4:36	JC	5127278
Surr: 1,2-Dichloroethane-d4	97.1		% 78-116	1	07/23/09 4:36	JC	5127278
Surr: 4-Bromofluorobenzene	89.9		% 74-125	1	07/23/09 4:36	JC	5127278
Surr: Toluene-d8	103		% 82-118	1	07/23/09 4:36	JC	5127278

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
San Juan 27-5#34A

Analysis: Total Petroleum Hydrocarbons
Method: E418.1

WorkOrder: 09070987
Lab Batch ID: R278751

Method Blank

RunID: EX_090721B-5123348 Units: mg/kg
Analysis Date: 07/21/2009 14:27 Analyst: LLL
Preparation Date: 07/12/2009 10:22 Prep By: Method:

Analyte	Result	Rep Limit
Petroleum Hydrocarbons,TR	ND	10

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Laboratory Control Sample (LCS)

RunID: EX_090721B-5123349 Units: mg/kg
Analysis Date: 07/21/2009 14:27 Analyst: LLL
Preparation Date: 07/12/2009 10:22 Prep By: Method:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Petroleum Hydrocarbons,TR	200	195	97.5	80	120

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

Sample Spiked: 09070987-01
RunID: EX_090721B-5123356 Units: mg/kg-dry
Analysis Date: 07/21/2009 14:27 Analyst: LLL
Preparation Date: 07/12/2009 10:22 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	ND	256	244	92.5	256	263	100	7.59	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.

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8/4/2009 4:47:58 PM



Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Mercury, Total
Method: SW7471A

WorkOrder: 09070987
Lab Batch ID: 92190

Method Blank

RunID: HGLC_090721B-5123694 Units: mg/kg
Analysis Date: 07/21/2009 15:59 Analyst: F_S
Preparation Date: 07/21/2009 14:10 Prep By: F_S Method: SW7471A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Analyte	Result	Rep Limit
Mercury	ND	0.03

Laboratory Control Sample (LCS)

RunID: HGLC_090721B-5123695 Units: mg/kg
Analysis Date: 07/21/2009 16:01 Analyst: F_S
Preparation Date: 07/21/2009 14:10 Prep By: F_S Method: SW7471A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	3.600	3.991	110.9	68	132

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

Sample Spiked: 09070739-05
RunID: HGLC_090721B-5123697 Units: mg/kg-dry
Analysis Date: 07/21/2009 16:09 Analyst: F_S
Preparation Date: 07/21/2009 13:10 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	0.3456	0.3388	98.02	0.3456	0.3424	99.07	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.

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Quality Control Report

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

Conoco Phillips San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270A-I

Method Blank

RunID: ICPMS_090728A-5134050 Units: mg/kg
Analysis Date: 07/28/2009 18:35 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'-17'-2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Analyte	Result	Rep Limit
Chromium	ND	0.5
Lead	ND	0.5
Thallium	ND	0.5

Laboratory Control Sample (LCS)

RunID: ICPMS_090728A-5134051 Units: mg/kg
Analysis Date: 07/28/2009 18:40 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chromium	60.80	56.54	92.99	78	121
Lead	76.80	74.10	96.48	81	120
Thallium	158.0	151.1	95.63	76	125

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

Sample Spiked: 09071129-01
RunID: ICPMS_090728A-5134056 Units: mg/kg
Analysis Date: 07/28/2009 19:04 Analyst: S_C

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chromium	16.5	10	27.36	108.2	10	27.73	111.9	1.343	20	75	125

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

Sample Spiked: 09071129-01
RunID: ICPMS_090728A-5134053 Units: mg/kg
Analysis Date: 07/28/2009 18:50 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270A-I

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chromium	16.54	10	39.95	234.1 *	10	35.16	186.2 *	12.75	20	75	125
Lead	15.24	10	25.13	98.90	10	26.35	111.1	4.740	20	75	125
Thallium	ND	10	10.09	100.9	10	9.824	98.24	2.671	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.

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Quality Control Report

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

Conoco Phillips San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270b-I

Method Blank

RunID: ICPMS2_090729C-5134456 Units: mg/kg
Analysis Date: 07/29/2009 22:35 Analyst: EG
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Analyte	Result	Rep Limit
Arsenic	ND	0.5
Barium	ND	0.5
Copper	ND	0.5
Vanadium	ND	0.5
Zinc	ND	1

Laboratory Control Sample (LCS)

RunID: ICPMS2_090729C-5134458 Units: mg/kg
Analysis Date: 07/29/2009 22:41 Analyst: EG
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	80.90	69.02	85.32	79	121
Barium	156.0	144.0	92.31	82	119
Copper	131.0	122.2	93.28	79	118
Vanadium	72.40	63.56	87.79	71	128
Zinc	116.0	103.6	89.31	78	122

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

Sample Spiked: 09071129-01
RunID: ICPMS2_090729C-5134464 Units: mg/kg
Analysis Date: 07/29/2009 23:09 Analyst: EG

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Vanadium	15	10	24.93	99.50	10	25	100.2	0.2804	20	75	125
Zinc	29.4	10	38.02	85.70	10	37.84	83.90	0.4746	20	75	125

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

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270b-I

Sample Spiked: 09071129-01
RunID: ICPMS2_090729C-5134460 Units: mg/kg
Analysis Date: 07/29/2009 22:52 Analyst: EG
Preparation Date: 07/23/2009 11:15 Prep By: R_V 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	3.394	10	11.10	77.06	10	11.44	80.46	3.017	20	75	125
Barium	103.7	10	115.6	N/C	10	111.5	N/C	N/C	20	75	125
Copper	25.47	10	34.57	91.00	10	34.38	89.10	0.5511	20	75	125
Vanadium	14.98	10	31.85	168.7 *	10	29.66	146.8 *	7.121	20	75	125
Zinc	29.45	10	50.93	214.8 *	10	49.41	199.6 *	3.030	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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270D

Method Blank

RunID: ICP2_090804A-5141310 Units: mg/kg
Analysis Date: 08/04/2009 12:10 Analyst: AB1
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Analyte	Result	Rep Limit
Aluminum	ND	10
Boron	ND	1
Calcium	ND	10
Iron	ND	1
Magnesium	ND	10
Potassium	ND	50
Sodium	ND	10
Strontium	ND	0.3
Tin	ND	0.5

Laboratory Control Sample (LCS)

RunID: ICP2_090804A-5141311 Units: mg/kg
Analysis Date: 08/04/2009 12:15 Analyst: AB1
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Aluminum	7590	6089	80.22	58	142
Boron	96.60	80.08	82.90	56	144
Calcium	4320	3849	89.10	79	121
Iron	14400	11400	79.17	52	149
Magnesium	2220	1917	86.35	77	123
Potassium	2380	2093	87.94	71	129
Sodium	456.0	391.0	85.75	56	144
Strontium	113.0	103.9	91.95	80	120
Tin	175.0	148.7	84.97	70	130

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

Sample Spiked: 09071129-01
RunID: ICP2_090804A-5141299 Units: mg/kg
Analysis Date: 08/04/2009 11:23 Analyst: AB1

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270D

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDS Spike Added	PDS Result	PDS % Recovery	RPD	RPD Limit	Low Limit	High Limit
Boron	ND	20000	17410	86.89	20000	17480	87.24	0.4013	20	75	125
Potassium	ND	200000	187900	93.27	200000	187300	92.97	0.3198	20	75	125
Sodium	ND	20000	19270	94.12	20000	19050	93.02	1.148	20	75	125

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

Sample Spiked: 09071129-01
RunID: ICP2_090804A-5141290 Units: mg/kg
Analysis Date: 08/04/2009 11:10 Analyst: AB1
Preparation Date: 07/23/2009 11:15 Prep By: R_V 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	11670	200	17960	N/C	200	21270	N/C	N/C	20	75	125
Boron	ND	200	180.7	74.66 *	200	184.0	76.31	1.810	20	75	125
Calcium	107100	200	125200	N/C	200	123100	N/C	N/C	20	75	125
Iron	13850	200	14370	N/C	200	14300	N/C	N/C	20	75	125
Magnesium	4847	200	4285	N/C	200	5247	N/C	N/C	20	75	125
Potassium	ND	4000	3564	54.90 *	4000	3909	63.53 *	9.233	20	75	125
Sodium	ND	200	649.3	101.8	200	1322	438.2 *	68.25 *	20	75	125
Strontium	218.7	200	424.7	103.0	200	428.2	104.8	0.8207	20	75	125
Tin	ND	200	171.8	85.90	200	173.2	86.60	0.8116	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.
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.

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Quality Control Report

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

Conoco Phillips

San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270d-I

Method Blank

RunID: ICPMS_090803A-5140742 Units: mg/kg
Analysis Date: 08/04/2009 6:14 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Analyte	Result	Rep Limit
Selenium	ND	0.5

Laboratory Control Sample (LCS)

RunID: ICPMS_090803A-5140743 Units: mg/kg
Analysis Date: 08/04/2009 6:18 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Selenium	82.90	83.40	100.6	76	124

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

Sample Spiked: 09071129-01
RunID: ICPMS_090803A-5140748 Units: mg/kg
Analysis Date: 08/04/2009 6:43 Analyst: S_C

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Selenium	ND	10	0	290.6 *	10	D	209.7 *	32.34 *	20	75	125

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

Sample Spiked: 09071129-01
RunID: ICPMS_090803A-5141094 Units: mg/kg
Analysis Date: 08/04/2009 6:28 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V 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
Selenium	ND	10	D	D	10	D	D	D	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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270d-I

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270-I

Method Blank

RunID: ICPMS_090727A-5132621 Units: mg/kg
Analysis Date: 07/27/2009 19:51 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Analyte	Result	Rep Limit
Antimony	ND	0.5
Beryllium	ND	0.4
Cadmium	ND	0.5
Cobalt	ND	0.5
Lead	ND	0.5
Manganese	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_090727A-5132622 Units: mg/kg
Analysis Date: 07/27/2009 19:56 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Antimony	77.50	61.30	79.10	30	223
Beryllium	143.0	139.7	97.69	82	118
Cadmium	233.0	248.9	106.8	81	119
Cobalt	68.60	72.75	106.0	82	118
Lead	76.80	69.13	90.01	81	120
Manganese	304.0	290.6	95.59	80	120
Molybdenum	58.40	52.60	90.07	79	121
Nickel	49.60	52.82	106.5	81	119
Silver	80.00	79.86	99.82	61	139
Thallium	158.0	141.1	89.30	76	125

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

Sample Spiked: 09071129-01
RunID: ICPMS_090727A-5132627 Units: mg/kg
Analysis Date: 07/27/2009 20:20 Analyst: S_C

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

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

WorkOrder: 09070987
Lab Batch ID: 92270-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
Antimony	0.532	10	9.405	88.74	10	9.439	89.08	0.3609	20	75	125

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

Sample Spiked: 09071129-01
RunID: ICPMS_090727A-5132624 Units: mg/kg
Analysis Date: 07/27/2009 20:06 Analyst: S_C
Preparation Date: 07/23/2009 11:15 Prep By: R_V 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	0.5315	10	4.222	36.90 *	10	4.408	38.77 *	4.311	20	75	125
Beryllium	ND	10	9.022	87.53	10	9.098	88.29	0.8389	20	75	125
Cadmium	ND	10	8.666	85.50	10	8.803	86.87	1.568	20	75	125
Cobalt	2.400	10	12.83	104.3	10	13.10	107.0	2.083	20	75	125
Lead	14.88	10	24.65	97.70	10	25.57	106.9	3.664	20	75	125
Manganese	150.3	10	318.5	N/C	10	205.8	N/C	N/C	20	75	125
Molybdenum	2.311	10	12.39	100.8	10	12.06	97.49	2.699	20	75	125
Nickel	7.322	10	20.89	135.7 *	10	18.37	110.5	12.84	20	75	125
Silver	ND	10	8.328	83.28	10	8.686	86.86	4.208	20	75	125
Thallium	ND	10	10.08	100.8	10	9.714	97.14	3.698	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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09070987
Lab Batch ID: 92189

Method Blank

RunID: H_090723B-5128548 Units: ug/kg
Analysis Date: 07/23/2009 18:04 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	170
1,2-Dichlorobenzene	ND	170
1,2-Diphenylhydrazine	ND	170
1,3-Dichlorobenzene	ND	170
1,4-Dichlorobenzene	ND	170
2,4,5-Trichlorophenol	ND	170
2,4,6-Trichlorophenol	ND	170
2,4-Dichlorophenol	ND	170
2,4-Dimethylphenol	ND	170
2,4-Dinitrophenol	ND	170
2,4-Dinitrotoluene	ND	170
2,6-Dinitrotoluene	ND	170
2-Chloronaphthalene	ND	170
2-Chlorophenol	ND	170
2-Methylnaphthalene	ND	170
2-Nitroaniline	ND	170
2-Nitrophenol	ND	170
3,3'-Dichlorobenzidine	ND	170
3-Nitroaniline	ND	170
4,6-Dinitro-2-methylphenol	ND	170
4-Bromophenyl phenyl ether	ND	170
4-Chloro-3-methylphenol	ND	170
4-Chloroaniline	ND	170
4-Chlorophenyl phenyl ether	ND	170
4-Nitroaniline	ND	170
4-Nitrophenol	ND	170
Acenaphthene	ND	170
Acenaphthylene	ND	170
Aniline	ND	170
Anthracene	ND	170
Benzo(a)anthracene	ND	170
Benzo(a)pyrene	ND	170
Benzo(b)fluoranthene	ND	170
Benzo(g,h,i)perylene	ND	170
Benzo(k)fluoranthene	ND	170
Benzoic acid	ND	670
Benzyl alcohol	ND	170
Bis(2-chloroethoxy)methane	ND	170
Bis(2-chloroethyl)ether	ND	170
Bis(2-chloroisopropyl)ether	ND	170
Bis(2-ethylhexyl)phthalate	ND	170
Butyl benzyl phthalate	ND	170
Carbazole	ND	170
Chrysene	ND	170
Dibenz(a,h)anthracene	ND	170
Dibenzofuran	ND	170

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.
NTNC - Too numerous to count

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

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09070987
Lab Batch ID: 92189

Method Blank

RunID: H_090723B-5128548 Units: ug/kg
Analysis Date: 07/23/2009 18:04 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

Analyte	Result	Rep Limit
Diethyl phthalate	ND	170
Dimethyl phthalate	ND	170
Di-n-butyl phthalate	ND	170
Di-n-octyl phthalate	ND	170
Fluoranthene	ND	170
Fluorene	ND	170
Hexachlorobenzene	ND	170
Hexachlorobutadiene	ND	170
Hexachlorocyclopentadiene	ND	170
Hexachloroethane	ND	170
Indeno(1,2,3-cd)pyrene	ND	170
Isophorone	ND	170
Naphthalene	ND	170
Nitrobenzene	ND	170
N-Nitrosodi-n-propylamine	ND	170
N-Nitrosodiphenylamine	ND	330
Pentachlorophenol	ND	170
Phenanthrene	ND	170
Phenol	ND	170
Pyrene	ND	170
Pyridine	ND	170
2-Methylphenol	ND	170
3 & 4-Methylphenol	ND	330
Surr: 2,4,6-Tribromophenol	78.8	19-135
Surr: 2-Fluorobiphenyl	83.5	15-140
Surr: 2-Fluorophenol	84.4	15-122
Surr: Nitrobenzene-d5	85.9	10-134
Surr: Phenol-d5	89.2	10-123
Surr: Terphenyl-d14	80.0	18-166

Laboratory Control Sample (LCS)

RunID: H_090723B-5128549 Units: ug/kg
Analysis Date: 07/23/2009 18:35 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	850	744	87.5	34	116
1,2-Dichlorobenzene	850	734	86.4	32	129
1,2-Diphenylhydrazine	850	884	104	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
San Juan 27-5#34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09070987
Lab Batch ID: 92189

Laboratory Control Sample (LCS)

RunID: H_090723B-5128549 Units: ug/kg
Analysis Date: 07/23/2009 18:35 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,3-Dichlorobenzene	850	717	84.4	10	172
1,4-Dichlorobenzene	850	700	82.4	20	124
2,4,5-Trichlorophenol	850	721	84.8	40	150
2,4,6-Trichlorophenol	850	704	82.8	37	144
2,4-Dichlorophenol	850	730	85.9	39	135
2,4-Dimethylphenol	850	742	87.3	32	119
2,4-Dinitrophenol	850	584	68.7	10	191
2,4-Dinitrotoluene	850	736	86.6	30	150
2,6-Dinitrotoluene	850	743	87.4	30	150
2-Chloronaphthalene	850	731	86.0	20	175
2-Chlorophenol	850	751	88.4	23	134
2-Methylnaphthalene	850	775	91.2	30	135
2-Nitroaniline	850	728	85.6	20	175
2-Nitrophenol	850	737	86.7	29	182
3,3'-Dichlorobenzidine	850	592	69.6	10	261
3-Nitroaniline	850	681	80.1	20	175
4,6-Dinitro-2-methylphenol	850	729	85.8	10	181
4-Bromophenyl phenyl ether	850	836	98.4	20	175
4-Chloro-3-methylphenol	850	737	86.7	22	147
4-Chloroaniline	850	831	97.8	20	175
4-Chlorophenyl phenyl ether	850	725	85.3	25	158
4-Nitroaniline	850	677	79.6	20	175
4-Nitrophenol	850	610	71.8	10	132
Acenaphthene	850	725	85.3	30	160
Acenaphthylene	850	745	87.6	10	150
Aniline	1700	1450	85.3	10	160
Anthracene	850	813	95.6	27	133
Benz(a)anthracene	850	694	81.6	33	143
Benzo(a)pyrene	850	558	65.6	17	163
Benzo(b)fluoranthene	850	611	71.9	24	159
Benzo(g,h,i)perylene	850	621	73.1	10	219
Benzo(k)fluoranthene	850	607	71.4	11	162
Benzoic acid	850	587	69.1	10	450
Benzyl alcohol	850	777	91.4	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
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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09070987
Lab Batch ID: 92189

Laboratory Control Sample (LCS)

RunID: H_090723B-5128549 Units: ug/kg
Analysis Date: 07/23/2009 18:35 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bis(2-chloroethoxy)methane	850	759	89.3	33	184
Bis(2-chloroethyl)ether	850	746	87.8	28	158
Bis(2-chloroisopropyl)ether	850	743	87.4	36	166
Bis(2-ethylhexyl)phthalate	850	705	82.9	10	158
Butyl benzyl phthalate	850	702	82.6	10	152
Carbazole	850	787	92.6	45	135
Chrysene	850	684	80.5	17	168
Dibenz(a,h)anthracene	850	625	73.5	10	227
Dibenzofuran	850	751	88.4	30	160
Diethyl phthalate	850	739	86.9	10	160
Dimethyl phthalate	850	740	87.1	10	112
Di-n-butyl phthalate	850	808	95.1	10	118
Di-n-octyl phthalate	850	676	79.5	10	146
Fluoranthene	850	809	95.2	26	137
Fluorene	850	740	87.1	35	135
Hexachlorobenzene	850	811	95.4	10	152
Hexachlorobutadiene	850	720	84.7	20	140
Hexachlorocyclopentadiene	850	661	77.8	10	152
Hexachloroethane	850	715	84.1	25	118
Indeno(1,2,3-cd)pyrene	850	728	85.6	10	171
Isophorone	850	868	102	21	196
Naphthalene	850	752	88.5	21	133
Nitrobenzene	850	765	90.0	35	180
N-Nitrosodi-n-propylamine	850	763	89.8	10	230
N-Nitrosodiphenylamine	1700	2000	118	30	160
Pentachlorophenol	850	472	55.5	14	176
Phenanthrene	850	832	97.9	35	135
Phenol	850	704	82.8	44	120
Pyrene	850	736	86.6	34	138
Pyridine	1700	1370	80.6	10	150
2-Methylphenol	850	766	90.1	40	160
3 & 4-Methylphenol	850	817	96.1	40	160
Surr: 2,4,6-Tribromophenol	2500	2350	94.0	19	135
Surr: 2-Fluorobiphenyl	1700	1600	94.1	15	140

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
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MI - Matrix Interference
D - Recovery Unreportable due to Dilution
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Quality Control Report

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

Conoco Phillips San Juan 27-5#34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09070987
Lab Batch ID: 92189

Laboratory Control Sample (LCS)

RunID: H_090723B-5128549 Units: ug/kg
Analysis Date: 07/23/2009 18:35 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Surr: 2-Fluorophenol	2500	2480	99.2	15	122
Surr: Nitrobenzene-d5	1700	1640	96.5	32	153
Surr: Phenol-d5	2500	2450	98.0	10	123
Surr: Terphenyl-d14	1700	1460	85.9	18	166

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

Sample Spiked: 09070987-03
RunID: H_090723B-5128554 Units: ug/kg-dry
Analysis Date: 07/23/2009 22:13 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

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	909	667	73.4	909	690	76.0	3.46	28	34	116
1,2-Dichlorobenzene	ND	909	602	66.2	909	656	72.2	8.67	60	32	129
1,2-Diphenylhydrazine	ND	909	836	92.0	909	889	97.9	6.20	60	10	256
1,3-Dichlorobenzene	ND	909	584	64.2	909	635	69.9	8.42	60	10	172
1,4-Dichlorobenzene	ND	909	573	63.1	909	628	69.2	9.25	28	20	124
2,4,5-Trichlorophenol	ND	909	664	73.1	909	731	80.5	9.66	60	40	150
2,4,6-Trichlorophenol	ND	909	655	72.1	909	730	80.4	10.8	60	37	144
2,4-Dichlorophenol	ND	909	693	76.2	909	712	78.4	2.74	60	39	135
2,4-Dimethylphenol	ND	909	695	76.5	909	717	78.9	3.18	60	32	119
2,4-Dinitrophenol	ND	909	549	60.5	909	636	70.0	14.6	60	10	191
2,4-Dinitrotoluene	ND	909	724	79.6	909	808	88.9	11.0	50	30	150
2,6-Dinitrotoluene	ND	909	694	76.4	909	790	86.9	13.0	60	30	150
2-Chloronaphthalene	ND	909	684	75.3	909	741	81.5	7.95	60	20	175
2-Chlorophenol	ND	909	663	72.9	909	703	77.4	5.95	40	23	134
2-Methylnaphthalene	ND	909	709	78.0	909	746	82.1	5.14	60	30	135
2-Nitroaniline	ND	909	679	74.7	909	772	84.9	12.8	60	20	175
2-Nitrophenol	ND	909	658	72.5	909	697	76.7	5.68	60	29	182
3,3'-Dichlorobenzidine	ND	909	596	65.6	909	670	73.8	11.6	60	10	261

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

San Juan 27-5#34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09070987
Lab Batch ID: 92189

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

Sample Spiked: 09070987-03
RunID: H_090723B-5128554 Units: ug/kg-dry
Analysis Date: 07/23/2009 22:13 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

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	909	648	71.3	909	760	83.6	15.9	60	20	175
4,6-Dinitro-2-methylphenol	ND	909	681	74.9	909	746	82.1	9.14	60	10	181
4-Bromophenyl phenyl ether	ND	909	816	89.8	909	858	94.5	5.11	60	20	175
4-Chloro-3-methylphenol	ND	909	718	79.1	909	766	84.4	6.48	42	22	147
4-Chloroaniline	ND	909	812	89.4	909	847	93.2	4.12	60	20	175
4-Chlorophenyl phenyl ether	ND	909	694	76.4	909	754	82.9	8.27	60	25	158
4-Nitroaniline	ND	909	670	73.8	909	778	85.6	14.9	60	20	175
4-Nitrophenol	ND	909	557	61.3	909	647	71.2	14.9	50	10	132
Acenaphthene	ND	909	681	74.9	909	729	80.2	6.82	31	30	160
Acenaphthylene	ND	909	706	77.8	909	759	83.5	7.15	50	10	150
Aniline	ND	1820	1280	70.6	1820	1390	76.5	8.00	60	10	160
Anthracene	ND	909	798	87.9	909	866	95.3	8.09	50	27	133
Benz(a)anthracene	ND	909	693	76.2	909	761	83.8	9.41	50	33	143
Benzo(a)pyrene	ND	909	553	60.8	909	599	65.9	7.99	60	17	163
Benzo(b)fluoranthene	ND	909	611	67.3	909	665	73.2	8.38	60	24	159
Benzo(g,h,i)perylene	ND	909	627	69.1	909	672	74.0	6.91	60	10	219
Benzo(k)fluoranthene	ND	909	612	67.4	909	671	73.9	9.16	60	11	162
Benzoic acid	ND	909	388	42.7	909	432	47.5	10.7	60	10	450
Benzyl alcohol	ND	909	652	71.8	909	695	76.5	6.35	60	30	160
Bis(2-chloroethoxy)methane	ND	909	690	76.0	909	703	77.4	1.84	60	33	184
Bis(2-chloroethyl)ether	ND	909	639	70.4	909	699	76.9	8.95	60	28	158
Bis(2-chloroisopropyl)ether	ND	909	626	68.9	909	674	74.2	7.40	60	36	166
Bis(2-ethylhexyl)phthalate	ND	909	733	80.7	909	796	87.6	8.25	60	10	158
Butyl benzyl phthalate	ND	909	690	76.0	909	759	83.5	9.44	60	10	152
Carbazole	ND	909	810	89.2	909	878	96.6	7.98	60	45	135
Chrysene	ND	909	692	76.1	909	741	81.5	6.87	60	17	168
Dibenz(a,h)anthracene	ND	909	622	68.5	909	668	73.5	7.13	60	10	227
Dibenzofuran	ND	909	702	77.3	909	760	83.6	7.89	60	45	135
Diethyl phthalate	ND	909	717	78.9	909	810	89.2	12.2	60	10	160
Dimethyl phthalate	ND	909	709	78.0	909	801	88.1	12.2	60	10	112
Di-n-butyl phthalate	ND	909	828	91.2	909	929	102	11.4	60	40	132
Di-n-octyl phthalate	ND	909	688	75.8	909	736	81.1	6.75	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

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Quality Control Report

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

Conoco Phillips

San Juan 27-5#34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09070987
Lab Batch ID: 92189

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

Sample Spiked: 09070987-03
RunID: H_090723B-5128554 Units: ug/kg-dry
Analysis Date: 07/23/2009 22:13 Analyst: GY
Preparation Date: 07/21/2009 15:01 Prep By: QMT Method: SW3550C

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	909	803	88.4	909	903	99.4	11.8	60	26	137
Fluorene	ND	909	716	78.8	909	778	85.6	8.30	60	45	135
Hexachlorobenzene	ND	909	791	87.1	909	860	94.7	8.41	60	10	152
Hexachlorobutadiene	ND	909	641	70.6	909	667	73.4	3.92	60	20	140
Hexachlorocyclopentadiene	ND	909	473	52.1	909	552	60.7	15.2	60	10	152
Hexachloroethane	ND	909	560	61.6	909	636	70.0	12.7	60	25	118
Indeno(1,2,3-cd)pyrene	ND	909	710	78.1	909	791	87.1	10.8	60	10	171
Isophorone	ND	909	805	88.6	909	832	91.5	3.27	60	21	196
Naphthalene	ND	909	681	74.9	909	712	78.4	4.45	60	21	133
Nitrobenzene	ND	909	678	74.6	909	702	77.3	3.56	60	35	180
N-Nitrosodi-n-propylamine	ND	909	667	73.4	909	721	79.4	7.85	38	10	230
N-Nitrosodiphenylamine	ND	1820	1950	107	1820	2120	116	8.42	60	30	160
Pentachlorophenol	ND	909	359	39.5	909	369	40.6	2.64	50	14	176
Phenanthrene	ND	909	820	90.2	909	885	97.4	7.65	60	45	135
Phenol	ND	909	649	71.4	909	733	80.7	12.2	42	44	120
Pyrene	ND	909	717	78.9	909	782	86.1	8.70	31	26	127
Pyridine	ND	1820	1100	60.6	1820	1190	65.3	7.48	60	10	150
2-Methylphenol	ND	909	690	76.0	909	714	78.6	3.35	60	40	160
3 & 4-Methylphenol	ND	909	742	81.6	909	822	90.5	10.3	60	40	160
Surr: 2,4,6-Tribromophenol	ND	2670	2120	79.2	2670	2320	86.8	9.16	30	19	135
Surr: 2-Fluorobiphenyl	ND	1820	1450	80.0	1820	1490	81.8	2.18	30	15	140
Surr: 2-Fluorophenol	ND	2670	2030	76.0	2670	2050	76.8	1.05	30	15	122
Surr: Nitrobenzene-d5	ND	1820	1430	78.8	1820	1420	78.2	0.749	30	10	134
Surr: Phenol-d5	ND	2670	2160	80.8	2670	2200	82.4	1.96	30	10	123
Surr: Terphenyl-d14	ND	1820	1390	76.5	1820	1430	78.8	3.03	30	18	166

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279010

Method Blank

Samples in Analytical Batch:

RunID: Q_090722E-5127275 Units: ug/L
Analysis Date: 07/23/2009 3:16 Analyst: JC

Lab Sample ID Client Sample ID
09070987-05A 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	10
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.
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279010

Method Blank

RunID: Q_090722E-5127275 Units: ug/L
Analysis Date: 07/23/2009 3:16 Analyst: JC

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	99.6	78-116
Surr: 4-Bromofluorobenzene	90.9	74-125
Surr: Toluene-d8	104.4	82-118

Laboratory Control Sample (LCS)

RunID: Q_090722E-5127274 Units: ug/L
Analysis Date: 07/23/2009 2:50 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	20.8	104	71	128
1,1,1-Trichloroethane	20.0	19.1	95.3	61	135
1,1,2,2-Tetrachloroethane	20.0	19.5	97.6	60	133
1,1,2-Trichloroethane	20.0	20.9	104	77	127
1,1-Dichloroethane	20.0	18.9	94.6	68	132

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.

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Quality Control Report

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

Conoco Phillips

San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279010

Laboratory Control Sample (LCS)

RunID: Q_090722E-5127274 Units: ug/L
Analysis Date: 07/23/2009 2:50 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	19.4	97.0	65	134
1,1-Dichloropropene	20.0	17.3	86.3	68	126
1,2,3-Trichlorobenzene	20.0	18.8	94.2	36	154
1,2,3-Trichloropropane	20.0	20.0	100	38	153
1,2,4-Trichlorobenzene	20.0	18.2	90.8	69	144
1,2,4-Trimethylbenzene	20.0	18.9	94.6	64	128
1,2-Dibromo-3-chloropropane	20.0	19.3	96.7	44	141
1,2-Dibromoethane	20.0	21.3	107	75	124
1,2-Dichlorobenzene	20.0	19.2	96.1	68	124
1,2-Dichloroethane	20.0	19.4	97.1	61	138
1,2-Dichloropropane	20.0	18.6	93.1	76	123
1,3,5-Trimethylbenzene	20.0	18.2	91.1	61	127
1,3-Dichlorobenzene	20.0	18.8	94.1	68	127
1,3-Dichloropropane	20.0	20.7	103	76	125
1,4-Dichlorobenzene	20.0	18.8	94.2	68	124
2,2-Dichloropropane	20.0	17.2	86.0	42	142
2-Butanone	20.0	26.8	134	22	183
2-Chloroethyl vinyl ether	20.0	25.9	130	10	179
2-Chlorotoluene	20.0	19.2	96.1	64	132
2-Hexanone	20.0	18.6	92.9	31	178
4-Chlorotoluene	20.0	19.1	95.3	61	132
4-Isopropyltoluene	20.0	18.8	94.1	63	136
4-Methyl-2-pentanone	20.0	18.4	92.1	10	159
Acetone	20.0	20.3	102	10	200
Acrylonitrile	20.0	20.8	104	54	155
Benzene	20.0	18.8	93.8	74	123
Bromobenzene	20.0	19.0	94.8	68	125
Bromochloromethane	20.0	19.8	98.9	71	124
Bromodichloromethane	20.0	20.5	103	72	128
Bromoform	20.0	21.0	105	60	128
Bromomethane	20.0	18.2	90.9	53	130
Carbon disulfide	20.0	17.2	86.1	41	143
Carbon tetrachloride	20.0	19.5	97.5	59	142
Chlorobenzene	20.0	19.8	99.2	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.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279010

Laboratory Control Sample (LCS)

RunID: Q_090722E-5127274 Units: ug/L
Analysis Date: 07/23/2009 2:50 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	17.8	89.2	60	134
Chloroform	20.0	19.2	96.2	71	127
Chloromethane	20.0	18.0	89.8	50	139
Dibromochloromethane	20.0	20.7	104	65	130
Dibromomethane	20.0	20.5	102	79	124
Dichlorodifluoromethane	20.0	18.9	94.5	22	162
Ethylbenzene	20.0	19.0	94.9	72	127
Hexachlorobutadiene	20.0	18.4	91.9	45	152
Isopropylbenzene	20.0	16.3	81.7	58	130
Methyl tert-butyl ether	40.0	39.6	98.9	63	123
Methylene chloride	20.0	18.7	93.4	61	135
Naphthalene	20.0	18.7	93.7	33	148
n-Butylbenzene	20.0	18.3	91.6	62	136
n-Propylbenzene	20.0	18.0	89.9	57	131
sec-Butylbenzene	20.0	18.7	93.4	63	131
Styrene	20.0	19.8	99.2	69	120
tert-Butylbenzene	20.0	18.4	92.0	59	131
Tetrachloroethene	20.0	20.3	102	45	173
Toluene	20.0	20.7	104	74	126
Trichloroethene	20.0	20.2	101	79	131
Trichlorofluoromethane	20.0	18.9	94.7	49	153
Vinyl acetate	20.0	15.2	76.0	10	167
Vinyl chloride	20.0	17.3	86.4	51	148
cis-1,2-Dichloroethene	20.0	19.8	99.0	71	128
cis-1,3-Dichloropropene	20.0	20.3	102	67	128
m,p-Xylene	40.0	39.0	97.4	71	129
o-Xylene	20.0	20.4	102	74	130
trans-1,2-Dichloroethene	20.0	18.4	92.0	66	128
trans-1,3-Dichloropropene	20.0	20.1	100	60	128
1,2-Dichloroethene (total)	40.0	38.2	95.5	66	128
Xylenes, Total	60.0	59.4	99.0	71	130
Surr: 1,2-Dichloroethane-d4	50.0	49.1	98.1	78	116
Surr: 4-Bromofluorobenzene	50.0	46.8	93.5	74	125
Surr: Toluene-d8	50.0	51.2	102	82	118

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

San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279010

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

Sample Spiked: 09070989-07
RunID: Q_090722E-5127286 Units: ug/L
Analysis Date: 07/23/2009 8:21 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	21.3	107	20	21.5	107	0.762	20	68	124
1,1,1-Trichloroethane	ND	20	21.9	109	20	21.3	107	2.49	20	69	123
1,1,2,2-Tetrachloroethane	ND	20	20.8	104	20	20.3	102	2.55	20	69	130
1,1,2-Trichloroethane	ND	20	22.4	112	20	21.2	106	5.73	20	75	126
1,1-Dichloroethane	ND	20	19.7	98.3	20	19.9	99.4	1.10	20	65	129
1,1-Dichloroethene	ND	20	20.4	102	20	20.2	101	0.873	22	61	139
1,1-Dichloropropene	ND	20	20.1	100	20	20.1	100	0.0896	20	69	121
1,2,3-Trichlorobenzene	ND	20	19.1	95.4	20	19.2	96.1	0.694	20	53	127
1,2,3-Trichloropropane	ND	20	20.9	104	20	20.5	103	1.79	20	79	124
1,2,4-Trichlorobenzene	ND	20	19.0	95.0	20	18.9	94.5	0.533	20	58	118
1,2,4-Trimethylbenzene	ND	20	21.1	105	20	21.0	105	0.409	20	43	132
1,2-Dibromo-3-chloropropane	ND	20	19.4	96.8	20	20.0	99.9	3.15	20	46	131
1,2-Dibromoethane	ND	20	21.9	109	20	21.9	110	0.187	20	76	122
1,2-Dichlorobenzene	ND	20	20.8	104	20	21.2	106	2.02	20	74	110
1,2-Dichloroethane	ND	20	21.7	108	20	21.5	108	0.662	20	60	129
1,2-Dichloropropane	ND	20	19.3	96.4	20	19.4	97.1	0.749	20	76	116
1,3,5-Trimethylbenzene	ND	20	21.3	107	20	20.3	102	4.79	20	51	121
1,3-Dichlorobenzene	ND	20	21.1	105	20	20.1	100	4.82	20	71	110
1,3-Dichloropropane	ND	20	21.4	107	20	21.3	106	0.749	20	80	119
1,4-Dichlorobenzene	ND	20	21.1	105	20	20.5	103	2.62	20	69	110
2,2-Dichloropropane	ND	20	21.7	109	20	21.5	108	0.962	20	52	122
2-Butanone	ND	20	27.4	137 *	20	29.7	148 *	7.95	20	10	133
2-Chloroethyl vinyl ether	ND	20	0	0 *	20	0	0 *	0	20	10	182
2-Chlorotoluene	ND	20	21.6	108	20	21.3	106	1.59	20	69	112
2-Hexanone	ND	20	18.6	92.9	20	18.1	90.3	2.84	20	10	163
4-Chlorotoluene	ND	20	21.4	107	20	20.9	104	2.22	20	37	110
4-Isopropyltoluene	ND	20	21.8	109	20	21.2	106	2.90	20	65	116
4-Methyl-2-pentanone	ND	20	20.8	104	20	20.6	103	1.01	20	10	159
Acetone	ND	20	12.8	63.8	20	13.4	67.1	5.10	20	10	160
Acrylonitrile	ND	20	19.4	96.8	20	20.8	104	6.97	20	45	155

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

San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279010

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

Sample Spiked: 09070989-07
RunID: Q_090722E-5127286 Units: ug/L
Analysis Date: 07/23/2009 8:21 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	19.8	98.9	20	19.4	96.8	2.19	22	70	124
Bromobenzene	ND	20	21.0	105	20	20.8	104	1.30	20	72	111
Bromochloromethane	ND	20	19.9	99.5	20	19.4	96.9	2.67	20	73	126
Bromodichloromethane	ND	20	21.5	107	20	21.6	108	0.700	20	68	125
Bromoform	ND	20	22.5	112	20	21.1	106	6.28	20	44	132
Bromomethane	ND	20	17.1	85.3	20	18.8	94.1	9.75	20	50	140
Carbon disulfide	ND	20	19.2	95.9	20	19.7	98.4	2.57	20	46	143
Carbon tetrachloride	ND	20	21.6	108	20	22.0	110	1.95	20	66	126
Chlorobenzene	ND	20	22.2	111	20	21.4	107	3.71	21	68	123
Chloroethane	ND	20	17.4	87.0	20	18.0	90.1	3.50	20	59	134
Chloroform	ND	20	21.0	105	20	20.4	102	2.81	20	68	127
Chloromethane	ND	20	19.1	95.3	20	19.6	98.0	2.81	20	51	137
Dibromochloromethane	ND	20	21.7	109	20	20.6	103	5.11	20	58	131
Dibromomethane	ND	20	20.2	101	20	20.7	104	2.44	20	82	123
Dichlorodifluoromethane	ND	20	20.3	102	20	21.8	109	6.98	20	35	143
Ethylbenzene	ND	20	21.7	108	20	21.8	109	0.520	20	76	122
Hexachlorobutadiene	ND	20	20.8	104	20	20.7	104	0.548	20	43	137
Isopropylbenzene	ND	20	19.2	96.2	20	18.8	93.9	2.47	20	57	124
Methyl tert-butyl ether	ND	40	39.2	98.1	40	40.9	102	4.18	20	10	200
Methylene chloride	ND	20	18.9	94.7	20	19.6	98.0	3.43	20	70	134
Naphthalene	ND	20	18.6	93.2	20	19.3	96.6	3.61	20	42	140
n-Butylbenzene	ND	20	21.5	108	20	20.9	105	2.87	20	82	112
n-Propylbenzene	ND	20	20.6	103	20	19.9	99.7	3.39	20	73	108
sec-Butylbenzene	ND	20	22.2	111 *	20	21.1	106	4.99	20	76	110
Styrene	ND	20	21.8	109	20	21.1	106	3.07	20	58	152
tert-Butylbenzene	ND	20	21.2	106	20	21.1	106	0.411	20	66	120
Tetrachloroethene	ND	20	19.1	95.5	20	18.8	94.2	1.37	20	71	130
Toluene	ND	20	23.2	116	20	22.3	112	3.79	24	80	117
Trichloroethene	ND	20	21.8	109	20	21.1	105	3.23	21	82	121
Trichlorofluoromethane	ND	20	18.7	93.6	20	18.9	94.5	0.962	20	74	138
Vinyl acetate	ND	20	15.2	75.8	20	15.6	77.9	2.78	20	66	135
Vinyl chloride	ND	20	17.8	89.2	20	19.0	95.0	6.34	20	45	143

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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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279010

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

Sample Spiked: 09070989-07
RunID: Q_090722E-5127286 Units: ug/L
Analysis Date: 07/23/2009 8:21 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	19.7	98.4	20	20.2	101	2.47	20	67	132
cis-1,3-Dichloropropene	ND	20	21.0	105	20	21.6	108	2.82	20	67	116
m,p-Xylene	ND	40	46.3	116	40	44.1	110	4.81	20	69	127
o-Xylene	ND	20	23.4	117 *	20	21.8	109	7.21	20	84	114
trans-1,2-Dichloroethene	ND	20	20.0	100	20	19.8	99.0	1.20	20	68	131
trans-1,3-Dichloropropene	ND	20	20.3	101	20	20.6	103	1.56	20	56	131
1,2-Dichloroethene (total)	ND	40	39.7	99.3	40	40.0	99.9	0.638	20	67	132
Xylenes, Total	ND	60	69.7	116	60	65.9	110	5.61	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	44.8	89.6	50	49.0	98.0	8.91	30	78	116
Surr: 4-Bromofluorobenzene	ND	50	48.2	96.3	50	48.3	96.6	0.286	30	74	125
Surr: Toluene-d8	ND	50	51.2	102	50	50.1	100	2.19	30	82	118

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279199

Method Blank

RunID: M_090726A-5130091 Units: ug/kg
Analysis Date: 07/26/2009 13:02 Analyst: TLE

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02B	MW-4 (18'-19')
09070987-03B	MW-3 (18'-20')
09070987-04B	MW-2 (18'-19.5')

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

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279199

Method Blank

RunID: M_090726A-5130091 Units: ug/kg
Analysis Date: 07/26/2009 13:02 Analyst: TLE

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	10
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,2-Dichloroethene (total)	ND	5.0
Xylenes, Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	94.6	71-130
Surr: 4-Bromofluorobenzene	99.1	65-131
Surr: Toluene-d8	107.0	75-136

Laboratory Control Sample (LCS)

RunID: M_090726A-5130090 Units: ug/kg
Analysis Date: 07/26/2009 11:09 Analyst: TLE

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	19.4	96.9	56	140
1,1,1-Trichloroethane	20.0	21.6	108	58	135
1,1,2,2-Tetrachloroethane	20.0	19.8	99.0	52	139
1,1,2-Trichloroethane	20.0	19.4	97.0	81	138
1,1-Dichloroethane	20.0	16.8	83.9	56	137

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279199

Laboratory Control Sample (LCS)

RunID: M_090726A-5130090 Units: ug/kg
Analysis Date: 07/26/2009 11:09 Analyst: TLE

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	19.2	96.0	56	135
1,1-Dichloropropene	20.0	19.8	98.9	62	132
1,2,3-Trichlorobenzene	20.0	18.6	93.0	53	144
1,2,3-Trichloropropane	20.0	19.9	99.5	44	141
1,2,4-Trichlorobenzene	20.0	17.8	89.1	51	143
1,2,4-Trimethylbenzene	20.0	19.4	97.1	59	148
1,2-Dibromo-3-chloropropane	20.0	21.9	109	53	144
1,2-Dibromoethane	20.0	19.0	95.2	55	138
1,2-Dichlorobenzene	20.0	19.0	95.1	63	137
1,2-Dichloroethane	20.0	20.5	103	56	135
1,2-Dichloropropane	20.0	19.1	95.3	62	132
1,3,5-Trimethylbenzene	20.0	19.2	96.0	54	145
1,3-Dichlorobenzene	20.0	19.2	96.1	66	137
1,3-Dichloropropane	20.0	19.3	96.6	59	138
1,4-Dichlorobenzene	20.0	18.9	94.4	61	142
2,2-Dichloropropane	20.0	21.1	106	55	138
2-Butanone	20.0	20.3	101	10	191
2-Chloroethyl vinyl ether	20.0	18.3	91.4	10	181
2-Chlorotoluene	20.0	19.4	97.0	64	139
2-Hexanone	20.0	21.1	106	18	182
4-Chlorotoluene	20.0	19.4	97.0	63	138
4-Isopropyltoluene	20.0	19.6	97.9	59	156
4-Methyl-2-pentanone	20.0	18.4	92.0	10	166
Acetone	20.0	20.9	104	10	200
Acrylonitrile	20.0	19.8	99.1	38	169
Benzene	20.0	18.6	92.8	64	130
Bromobenzene	20.0	18.2	90.9	58	139
Bromochloromethane	20.0	18.5	92.6	66	127
Bromodichloromethane	20.0	19.9	99.6	59	134
Bromoform	20.0	18.9	94.4	65	135
Bromomethane	20.0	18.9	94.3	40	134
Carbon disulfide	20.0	17.7	88.3	53	130
Carbon tetrachloride	20.0	21.2	106	61	132
Chlorobenzene	20.0	18.8	93.8	60	140

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
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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
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279199

Laboratory Control Sample (LCS)

RunID: M_090726A-5130090 Units: ug/kg
Analysis Date: 07/26/2009 11:09 Analyst: TLE

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	18.6	92.9	45	140
Chloroform	20.0	19.9	99.6	64	131
Chloromethane	20.0	17.3	86.4	39	140
Dibromochloromethane	20.0	18.7	93.5	54	138
Dibromomethane	20.0	19.5	97.4	64	131
Dichlorodifluoromethane	20.0	20.9	105	35	133
Ethylbenzene	20.0	18.5	92.6	58	143
Hexachlorobutadiene	20.0	19.0	94.9	56	166
Isopropylbenzene	20.0	16.5	82.4	58	133
Methyl tert-butyl ether	40.0	33.9	84.9	50	132
Methylene chloride	20.0	20.4	102	52	144
Naphthalene	20.0	19.5	97.6	51	139
n-Butylbenzene	20.0	20.1	100	59	164
n-Propylbenzene	20.0	17.9	89.6	57	140
sec-Butylbenzene	20.0	19.9	99.7	63	146
Styrene	20.0	18.6	92.9	57	134
tert-Butylbenzene	20.0	20.5	103	57	144
Tetrachloroethene	20.0	16.1	80.5	41	156
Toluene	20.0	18.4	91.8	63	139
Trichloroethene	20.0	18.9	94.5	62	135
Trichlorofluoromethane	20.0	21.4	107	53	140
Vinyl acetate	20.0	16.3	81.4	17	163
Vinyl chloride	20.0	15.5	77.6	45	148
cis-1,2-Dichloroethene	20.0	19.4	97.1	70	129
cis-1,3-Dichloropropene	20.0	19.6	97.9	58	132
m,p-Xylene	40.0	38.5	96.2	64	137
o-Xylene	20.0	19.5	97.3	64	143
trans-1,2-Dichloroethene	20.0	19.3	96.3	63	130
trans-1,3-Dichloropropene	20.0	18.8	94.1	58	128
1,2-Dichloroethene (total)	40.0	38.7	96.7	63	130
Xylenes, Total	60	58	97	64	143
Surr: 1,2-Dichloroethane-d4	50.0	43.1	86.1	71	130
Surr: 4-Bromofluorobenzene	50.0	41.8	83.5	65	131
Surr: Toluene-d8	50.0	41.2	82.3	75	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.
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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279199

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

Sample Spiked: 09070987-03
RunID: M_090726A-5130093 Units: ug/kg-dry
Analysis Date: 07/26/2009 14:04 Analyst: TLE
Preparation Date: 07/26/2009 11:54 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	21.4	17.5	81.9	21.4	19.2	89.7	9.08	30	38	129
1,1,1-Trichloroethane	ND	21.4	20.8	97.3	21.4	23.2	108	10.8	30	44	154
1,1,2,2-Tetrachloroethane	ND	21.4	16.7	78.3	21.4	18.3	85.7	9.10	30	14	143
1,1,2-Trichloroethane	ND	21.4	17.4	81.4	21.4	18.9	88.6	8.54	30	34	135
1,1-Dichloroethane	ND	21.4	18.4	86.0	21.4	20.2	94.6	9.49	30	42	146
1,1-Dichloroethene	ND	21.4	18.7	87.7	21.4	21.0	98.2	11.3	22	39	168
1,1-Dichloropropene	ND	21.4	19.4	90.7	21.4	21.2	99.4	9.19	30	42	156
1,2,3-Trichlorobenzene	ND	21.4	13.4	62.9	21.4	16.9	79.2	23.0	30	10	125
1,2,3-Trichloropropane	ND	21.4	17.5	81.8	21.4	18.6	86.8	5.94	30	10	154
1,2,4-Trichlorobenzene	ND	21.4	13.1	61.2	21.4	16.6	77.8	24.0	30	10	128
1,2,4-Trimethylbenzene	ND	21.4	16.3	76.3	21.4	20.1	94.0	20.8	30	22	139
1,2-Dibromo-3-chloropropane	ND	21.4	16.1	75.5	21.4	17.7	83.0	9.47	30	23	139
1,2-Dibromoethane	ND	21.4	16.3	76.1	21.4	17.2	80.4	5.46	30	32	129
1,2-Dichlorobenzene	ND	21.4	15.7	73.6	21.4	18.6	87.0	16.7	30	17	130
1,2-Dichloroethane	ND	21.4	19.8	92.9	21.4	21.4	100	7.69	30	15	158
1,2-Dichloropropane	ND	21.4	17.7	82.8	21.4	19.7	92.0	10.5	30	42	133
1,3,5-Trimethylbenzene	ND	21.4	15.6	72.8	21.4	19.5	91.2	22.4	30	22	135
1,3-Dichlorobenzene	ND	21.4	16.4	76.6	21.4	20.0	93.4	19.8	30	22	130
1,3-Dichloropropane	ND	21.4	17.3	80.9	21.4	18.7	87.4	7.79	30	37	131
1,4-Dichlorobenzene	ND	21.4	15.8	73.9	21.4	19.2	90.0	19.6	30	20	129
2,2-Dichloropropane	ND	21.4	19.8	92.8	21.4	22.2	104	11.1	30	39	155
2-Butanone	ND	21.4	14.2	66.6	21.4	14.2	66.3	0.511	30	10	200
2-Chloroethyl vinyl ether	ND	21.4	14.8	69.4	21.4	17.5	81.8	16.4	30	10	168
2-Chlorotoluene	ND	21.4	16.2	75.6	21.4	19.1	89.6	16.9	30	30	133
2-Hexanone	ND	21.4	15.3	71.4	21.4	16.7	77.9	8.77	30	14	151
4-Chlorotoluene	ND	21.4	15.8	74.1	21.4	19.1	89.3	18.6	30	24	133
4-Isopropyltoluene	ND	21.4	15.8	73.9	21.4	20.8	97.4	27.5	30	17	143
4-Methyl-2-pentanone	ND	21.4	13.6	63.7	21.4	15.4	71.8	12.0	30	10	176
Acetone	ND	21.4	17.3	81.1	21.4	18.5	86.7	6.62	30	10	200
Acrylonitrile	ND	21.4	17.3	80.9	21.4	17.8	83.2	2.83	30	10	200

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
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279199

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

Sample Spiked: 09070987-03
RunID: M_090726A-5130093 Units: ug/kg-dry
Analysis Date: 07/26/2009 14:04 Analyst: TLE
Preparation Date: 07/26/2009 11:54 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	21.4	17.1	79.9	21.4	19.4	90.6	12.5	21	49	135
Bromobenzene	ND	21.4	15.1	70.7	21.4	17.5	82.0	14.9	30	29	127
Bromochloromethane	ND	21.4	17.3	81.0	21.4	18.4	86.0	6.05	30	27	147
Bromodichloromethane	ND	21.4	18.5	86.4	21.4	20.4	95.6	10.2	30	32	138
Bromoform	ND	21.4	16.8	78.8	21.4	18.2	85.0	7.60	30	27	129
Bromomethane	ND	21.4	18.3	85.8	21.4	19.8	92.6	7.65	30	32	142
Carbon disulfide	ND	21.4	16.9	79.2	21.4	18.8	87.7	10.2	30	25	168
Carbon tetrachloride	ND	21.4	20.6	96.5	21.4	22.6	106	9.20	30	48	151
Chlorobenzene	ND	21.4	17.1	80.1	21.4	19.3	90.2	11.8	21	38	130
Chloroethane	ND	21.4	18.8	87.8	21.4	20.3	94.9	7.77	30	29	161
Chloroform	ND	21.4	19.6	91.5	21.4	21.0	98.4	7.30	30	34	153
Chloromethane	ND	21.4	16.6	77.5	21.4	18.9	88.5	13.3	30	31	151
Dibromochloromethane	ND	21.4	16.7	78.0	21.4	17.8	83.3	6.56	30	31	127
Dibromomethane	ND	21.4	18.4	86.3	21.4	19.7	92.0	6.48	30	30	141
Dichlorodifluoromethane	ND	21.4	20.8	97.4	21.4	23.8	111	13.2	30	15	167
Ethylbenzene	ND	21.4	16.4	76.9	21.4	19.0	88.9	14.5	30	39	135
Hexachlorobutadiene	ND	21.4	15.2	71.0	21.4	21.7	101	35.2 *	30	10	149
Isopropylbenzene	ND	21.4	15.3	71.4	21.4	17.9	83.5	15.6	30	25	142
Methyl tert-butyl ether	ND	42.8	33.7	78.8	42.8	37.6	87.9	10.9	30	19	142
Methylene chloride	ND	21.4	20.9	74.8	21.4	22.1	80.3	5.48	30	13	170
Naphthalene	ND	21.4	13.1	61.3	21.4	15.8	73.8	18.4	30	10	124
n-Butylbenzene	ND	21.4	16.8	78.6	21.4	22.6	106	29.4	30	10	156
n-Propylbenzene	ND	21.4	14.7	68.8	21.4	18.3	85.4	21.5	30	20	141
sec-Butylbenzene	ND	21.4	16.4	76.7	21.4	20.8	97.3	23.7	30	29	142
Styrene	ND	21.4	16.7	78.0	21.4	19.0	88.9	13.0	30	28	133
tert-Butylbenzene	ND	21.4	17.4	81.3	21.4	22.0	103	23.5	30	26	141
Tetrachloroethene	ND	21.4	14.7	68.8	21.4	17.5	81.7	17.1	30	33	149
Toluene	ND	21.4	17.1	80.1	21.4	19.1	89.2	10.6	21	49	133
Trichloroethene	ND	21.4	17.6	82.2	21.4	20.0	93.5	12.9	24	51	142
Trichlorofluoromethane	ND	21.4	19.2	89.9	21.4	23.1	108	18.3	30	24	184
Vinyl acetate	ND	21.4	7.97	37.3	21.4	8.37	39.2	4.98	30	10	174
Vinyl chloride	ND	21.4	18.5	86.5	21.4	21.4	100	14.8	30	29	177

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.
NTNC - Too numerous to count

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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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09070987
Lab Batch ID: R279199

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

Sample Spiked: 09070987-03
RunID: M_090726A-5130093 Units: ug/kg-dry
Analysis Date: 07/26/2009 14:04 Analyst: TLE
Preparation Date: 07/26/2009 11:54 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	21.4	18.4	86.3	21.4	20.4	95.5	10.2	30	38	151
cis-1,3-Dichloropropene	ND	21.4	16.8	78.7	21.4	18.9	88.6	11.8	30	31	131
m,p-Xylene	ND	42.8	35.5	83.0	42.8	41.1	96.1	14.6	30	32	140
o-Xylene	ND	21.4	18.1	84.5	21.4	20.6	96.4	13.1	30	36	142
trans-1,2-Dichloroethene	ND	21.4	18.5	86.5	21.4	20.4	95.4	9.78	30	41	153
trans-1,3-Dichloropropene	ND	21.4	16.5	77.2	21.4	18.1	84.8	9.44	30	27	128
1,2-Dichloroethene (total)	ND	42.8	36.9	86.4	42.8	40.8	95.4	9.97	30	38	153
Xylenes, Total	ND	64.1	53.6	83.5	64.1	61.7	96.2	14.1	30	32	142
Surr: 1,2-Dichloroethane-d4	ND	53.4	49.5	92.7	53.4	49.8	93.1	0.489	30	71	130
Surr: 4-Bromofluorobenzene	ND	53.4	57.8	108	53.4	57.8	108	0.0647	30	65	131
Surr: Toluene-d8	ND	53.4	56.3	105	53.4	55.9	105	0.718	30	75	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

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: PERCENT MOISTURE
Method: D2216

WorkOrder: 09070987
Lab Batch ID: R278622

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Sample Duplicate

Original Sample: 09070950-01
RunID: WET_090720Q-5121388 Units: wt%
Analysis Date: 07/20/2009 14:51 Analyst: EB1

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Percent Moisture	16.7	16.77	0.151	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.
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Alkalinity (as CaCO₃), Total
Method: E310.1

WorkOrder: 09070987
Lab Batch ID: R278836

Method Blank

RunID: WET_090722A-5124582 Units: mg/L
Analysis Date: 07/22/2009 9:30 Analyst: PAC

Analyte	Result	Rep Limit
Alkalinity, Total (As CaCO ₃)	ND	20

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Laboratory Control Sample (LCS)

RunID: WET_090722A-5124584 Units: mg/L
Analysis Date: 07/22/2009 9:30 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Alkalinity, Total (As CaCO ₃)	38.70	38.00	98.19	90	110

Sample Duplicate

Original Sample: 09070987-01
RunID: WET_090722A-5124585 Units: mg/Kg-dry
Analysis Date: 07/22/2009 9:30 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Alkalinity, Total (As CaCO ₃)	397	397.4	0	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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09070987
Lab Batch ID: R279003

Method Blank

RunID: IC2_090721C-5127175 Units: mg/kg
Analysis Date: 07/21/2009 16:38 Analyst: BDG

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

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Laboratory Control Sample (LCS)

RunID: IC2_090721C-5127176 Units: mg/kg
Analysis Date: 07/21/2009 16:55 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	100.0	101.6	101.6	90	110
Nitrogen,Nitrite (As N)	100.0	104.9	104.9	90	110

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

Sample Spiked: 09070987-02
RunID: IC2_090721C-5127183 Units: mg/kg-dry
Analysis Date: 07/21/2009 18:52 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	113.4	117.7	103.8	113.4	114.4	100.9	2.883	20	80	120
Nitrogen,Nitrite (As N)	ND	113.4	120.5	106.3	113.4	117.3	103.5	2.707	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

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09070987
Lab Batch ID: R279007

Method Blank

RunID: IC2_090721D-5127232 Units: mg/kg
Analysis Date: 07/21/2009 16:38 Analyst: BDG

Analyte	Result	Rep Limit
Bromide	ND	5.0
Chloride	ND	5.0
Fluoride	ND	5.0
Sulfate	ND	5.0

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'4"-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Laboratory Control Sample (LCS)

RunID: IC2_090721D-5127233 Units: mg/kg
Analysis Date: 07/21/2009 16:55 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bromide	100.0	105.0	105.0	80	120
Chloride	100.0	102.0	102.0	80	120
Fluoride	100.0	103.9	103.9	80	120
Sulfate	100.0	105.2	105.2	80	120

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

Sample Spiked: 09070987-02
RunID: IC2_090721D-5127240 Units: mg/kg-dry
Analysis Date: 07/21/2009 18:52 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	113.4	121.4	105.9	113.4	118.2	103.1	2.668	20	75	125
Chloride	ND	113.4	122.0	104.3	113.4	119.0	101.7	2.484	20	75	125
Fluoride	ND	113.4	125.0	108.1	113.4	121.8	105.3	2.581	20	75	125
Sulfate	61.70	113.4	193.4	116.2	113.4	190.3	113.4	1.643	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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09070987
Lab Batch ID: R279187

Method Blank

RunID: IC2_090724B-5129962 Units: mg/kg
Analysis Date: 07/24/2009 16:27 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID Client Sample ID
09070987-01A MW-1 (15'4"-17'2")

Analyte	Result	Rep Limit
Chloride	ND	5.0

Laboratory Control Sample (LCS)

RunID: IC2_090724B-5129963 Units: mg/kg
Analysis Date: 07/24/2009 16:43 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	100.0	99.73	99.73	80	120

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

Sample Spiked: 09070987-01
RunID: IC2_090724B-5129965 Units: mg/kg-dry
Analysis Date: 07/24/2009 17:17 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	569.7	641	1268	109.0	641	1242	104.9	2.091	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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5#34A

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09070987
Lab Batch ID: R279341

Method Blank

RunID: IC2_090728A-5132169 Units: mg/kg
Analysis Date: 07/28/2009 13:14 Analyst: BDG

Analyte	Result	Rep Limit
Ortho-phosphate (As P)	ND	5.0

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09070987-01A	MW-1 (15'-17'2")
09070987-02A	MW-4 (18'-19')
09070987-03A	MW-3 (18'-20')
09070987-04A	MW-2 (18'-19.5')

Laboratory Control Sample (LCS)

RunID: IC2_090728A-5132171 Units: mg/kg
Analysis Date: 07/28/2009 13:30 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Ortho-phosphate (As P)	100.0	102.8	102.8	80	120

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

Sample Spiked: 09070987-01
RunID: IC2_090728A-5132176 Units: mg/kg-dry
Analysis Date: 07/28/2009 14:04 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
Ortho-phosphate (As P)	ND	128.2	135.0	101.3	128.2	135.3	101.5	0.1992	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.
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.

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*Sample Receipt Checklist
And
Chain of Custody*



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

Sample Receipt Checklist

Workorder: 09070987

Received By: BF

Date and Time Received: 7/20/2009 9:00:00 AM

Carrier name: FedEx

Temperature: 5.5°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:

APPENDIX C

Groundwater Sampling Field Forms



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name San Juan 275 34APage 1 of 4

Project No. _____

Site Location _____

Site/Well No. MW-1Coded/
Replicate No. 1030Date 7/28/09Weather sunny, hotTime Sampling
Began 900Time Sampling
Completed 910

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface _____ MP Elevation _____

Total Sounded Depth of Well Below MP 33.22 Water-Level Elevation _____Held _____ Depth to Water Below MP 23.21 Diameter of Casing _____ 2"Wet _____ Water Column in Well 10.01 Gallons Pumped/Bailed Prior to Sampling _____Gallons per Foot 0.14Gallons in Well 1.6 x 3 = 4.8 Sampling Pump Intake Setting (feet below land surface) _____

Purging Equipment _____

SAMPLING DATA/FIELD PARAMETERS g/L DO

Time	Temperature	pH	Conductivity	TDS in gpm	Other
<u>0903</u>	<u>13.57</u>	<u>7.15</u>	<u>739</u>	<u>0.477</u>	<u>1.95</u>
<u>0906</u>	<u>13.25</u>	<u>7.39</u>	<u>765</u>	<u>0.497</u>	<u>2.55</u>
<u>0908</u>	<u>12.83</u>	<u>7.54</u>	<u>777</u>	<u>0.505</u>	<u>2.67</u>

ORD

119.4

Sampling Equipment 1.5" Polyvinyl Disposable Bailer

Constituents Sampled

Container Description

Preservative

Constituents Sampled	Container Description	Preservative

Remarks _____

Sampling Personnel KB, CM, AM

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

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TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name

San Juan 2875 3A

Page

2 of 4

Project No.

Site Location

Site/Well No.

MW-2

Coded/

Replicate No.

Date

7/28/09

Weather

hot, 85°

Time Sampling
Beganbegan @ 8:50
bailed until only
getting ~4" water
in bottom of bailerTime Sampling
Completed

10:15 30

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface

MP Elevation

Total Sounded Depth of Well Below MP

34.35

Water-Level Elevation

Held

Depth to Water Below MP

22.72

Diameter of Casing

2"

Wet

Water Column in Well

11.63

Gallons Pumped/Bailed
Prior to Sampling

~6

Gallons per Foot

0.16

Gallons in Well

1.86 x 3 = 5.58

Sampling Pump Intake Setting
(feet below land surface)

Purging Equipment

SAMPLING DATA/FIELD PARAMETERS

DO%

DO (mg/L)

Time	Temperature	pH	Conductivity	TDS in ppm	Other
9:58	13.10	8.69	753	0.487	26.5
10:02	13.23	8.64	752	0.489	28.1
12:05	13.29	8.02	748	0.486	28.0

2.78

2.94

2.92

Sampling Equipment 1.5" Polyvinyl Disposable Bailer

Constituents Sampled

Container Description

Preservative

Remarks

Very slow recharge, couldn't bail completely dry; always at least 4" in bailer

Sampling Personnel

KB, CM, AM

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

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TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name San Juan 275 34APage 3 of 4

Project No. _____

Site Location _____

Site/Well No. MW-3Coded/
Replicate No. _____Date 7/28/89Weather hot. 85°Time Sampling
Began 0920Time Sampling
Completed 0935

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface _____ MP Elevation _____

Total Sounded Depth of Well Below MP 33.15 Water-Level Elevation _____Held _____ Depth to Water Below MP 22.84 Diameter of Casing 2"Wet _____ Water Column in Well 10.31 Gallons Pumped/Bailed
Prior to Sampling 5Gallons per Foot 0.16Gallons in Well 1.65 x 3 = Sampling Pump Intake Setting °
(feet below land surface) _____Purging Equipment 4.95SAMPLING DATA/FIELD PARAMETERS SC/L 00

Time	Temperature	pH	Conductivity	TDS in ppm	Other
<u>0927</u>	<u>12.71</u>	<u>7.46</u>	<u>741</u>	<u>0.481</u>	<u>2.42</u>
<u>0930</u>	<u>12.81</u>	<u>7.51</u>	<u>739</u>	<u>0.480</u>	<u>1.21</u>
<u>0932</u>	<u>12.76</u>	<u>7.52</u>	<u>736</u>	<u>0.478</u>	<u>1.18</u>

Sampling Equipment 1.5" Polyvinyl Disposable BailerConstituents SampledContainer DescriptionPreservative

Remarks _____

Sampling Personnel KB, CM, AM

Well Casing Volumes

Gal./ft.	1 ¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 ½" = 0.10	2 ½" = 0.24	3 ½" = 0.50	6" = 1.46

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TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name San Juan # 275 34APage 4 of 4

Project No. _____

Site Location _____

Site/Well No. MW-4Coded/
Replicate No. _____Date 7/28/09Weather sunny, 90°Time Sampling
Began 850Time Sampling
Completed _____

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface _____ MP Elevation _____

Total Sounded Depth of Well Below MP 32.65 Water-Level Elevation _____Held _____ Depth to Water Below MP 22.62 Diameter of Casing 2"Wet _____ Water Column in Well 10.03 Gallons Pumped/Bailed
Prior to Sampling _____Gallons per Foot .16Gallons in Well 0.60 Sampling Pump Intake Setting
(feet below land surface) _____Purging Equipment 1.5" disposable dedicated X3 = 1.8 polyethylene bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature	pH	Conductivity	TDS in ppm	Other
0937	13.00	8.02	876	0.570	5.30
0940	13.22	7.76	872	0.567	3.44
0944	13.74	7.78	873	0.568	3.49

Sampling Equipment 1.5" Polyvinyl Disposable Bailer

Constituents Sampled

Container Description

Preservative

BTEXTPH, GRO, OROGeneral Chem.metalsRemarks suspended solids visible in bailer, top half of bailer cloudierSampling Personnel KB, CM, AM & darker than bottom half

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

R:\Share\Maxim Forms\Field Forms\B Com MW-1 Water Sampling Field Form Entered Data.xls

APPENDIX D

Groundwater Laboratory Analysis Reports



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

Conoco Phillips

Certificate of Analysis Number:

09071498

<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> San Juan 27-5 #34A <u>Site:</u> Rio Ariba County <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> New Mexico <u>State Cert. No.:</u> <u>Date Reported:</u> 8/7/2009
--	---

This Report Contains A Total Of 60 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

8/10/2009

Date



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

Case Narrative for:
Conoco Phillips

Certificate of Analysis Number:

09071498

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: San Juan 27-5 #34A Site: Rio Ariba County Site Address: PO Number: State: New Mexico State Cert. No.: Date Reported: 8/7/2009
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I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

Per your request on July 30, 2009, the requested metals analysis was cancelled for all samples submitted.

II: ANALYSES AND EXCEPTIONS:

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.

Sample ID "MW-2" (SPL ID: 09071498-04) was randomly selected for use in SPL's quality control program for Batch ID: R280070. The Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recoveries were outside of the advisable quality control limits due to possible matrix interference for the following analytes: 2-Butanone, sec-Butylbenzene. In addition, the Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were outside of the advisable quality control limits for 2-Chloroethyl vinyl ether due to compound decomposition as a result of acid preservation. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

III. GENERAL REPORTING COMMENTS:

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

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

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

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

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

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

09071498 Page 1

8/10/2009

Erica Cardenas
Project Manager

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

Date



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

Case Narrative for:
Conoco Phillips

Certificate of Analysis Number:

09071498

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

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

A handwritten signature in cursive script, reading "Erica Cardenas", is located in the bottom left area of the page.

09071498 Page 2

8/10/2009

Erica Cardenas
Project Manager

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

Date



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

Conoco Phillips

Certificate of Analysis Number:

09071498

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: San Juan 27-5 #34A

Site: Rio Arriba County

Site Address:

PO Number:

State: New Mexico

State Cert. No.:

Date Reported: 8/7/2009

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-1	09071498-01	Water	7/28/2009 9:10:00 AM	7/29/2009 9:15:00 AM	327752	☐
MW-3	09071498-02	Water	7/28/2009 9:35:00 AM	7/29/2009 9:15:00 AM		☐
MW-4	09071498-03	Water	7/28/2009 9:45:00 AM	7/29/2009 9:15:00 AM		☐
MW-2	09071498-04	Water	7/28/2009 10:30:00 AM	7/29/2009 9:15:00 AM		☐
Duplicate	09071498-05	Water	7/28/2009 10:30:00 AM	7/29/2009 9:15:00 AM		☐
Trip Blank	09071498-06	Water	7/28/2009 11:00:00 AM	7/29/2009 9:15:00 AM		☐

Erica Cardenas

8/10/2009

Erica Cardenas
Project Manager

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer



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

Client Sample ID: MW-1

Collected: 07/28/2009 9:10

SPL Sample ID: 09071498-01

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL				MCL	E310.1	Units: mg/L	
Alkalinity, Total (As CaCO ₃)	306		2	1	07/30/09 8:45	PAC	5134857
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	0.11		0.1	1	08/01/09 18:41	NW	5138978
Surr: n-Pentacosane	61.2		% 20-150	1	08/01/09 18:41	NW	5138978
Prep Method	Prep Date	Prep Initials	Prep Factor				
SW3510C	07/30/2009 8:31	N_M	1.00				
GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	08/01/09 3:31	FAK	5138778
Surr: 1,4-Difluorobenzene	91.6		% 60-155	1	08/01/09 3:31	FAK	5138778
Surr: 4-Bromofluorobenzene	104		% 50-158	1	08/01/09 3:31	FAK	5138778
HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO ₃)	80		10	2	07/29/09 16:00	PAC	5134269
ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	07/29/09 14:29	BDG	5134940
Chloride	4.16		0.5	1	07/29/09 14:29	BDG	5134940
Fluoride	0.579		0.5	1	07/29/09 14:29	BDG	5134940
Ortho-phosphate (As P)	ND		0.5	1	08/03/09 19:12	BDG	5141474
Sulfate	85		5	10	08/03/09 19:30	BDG	5141475
Nitrogen, Nitrate (As N)	ND		0.5	1	07/29/09 14:29	BDG	5134919
Nitrogen, Nitrite (As N)	ND		0.5	1	07/29/09 14:29	BDG	5134919
PH				MCL	SM4500-H B	Units: pH Units	
pH	7.68		0.1	1	07/29/09 14:30	PAC	5134249

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)
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: 07/28/2009 9:10

SPL Sample ID: 09071498-01

Site: Rio Arriba County

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	08/06/09 18:49	S_G	5147641
1,2-Dichlorobenzene	ND		5	1	08/06/09 18:49	S_G	5147641
1,2-Diphenylhydrazine	ND		10	1	08/06/09 18:49	S_G	5147641
1,3-Dichlorobenzene	ND		5	1	08/06/09 18:49	S_G	5147641
1,4-Dichlorobenzene	ND		5	1	08/06/09 18:49	S_G	5147641
2,4,5-Trichlorophenol	ND		10	1	08/06/09 18:49	S_G	5147641
2,4,6-Trichlorophenol	ND		5	1	08/06/09 18:49	S_G	5147641
2,4-Dichlorophenol	ND		5	1	08/06/09 18:49	S_G	5147641
2,4-Dimethylphenol	ND		5	1	08/06/09 18:49	S_G	5147641
2,4-Dinitrophenol	ND		25	1	08/06/09 18:49	S_G	5147641
2,4-Dinitrotoluene	ND		5	1	08/06/09 18:49	S_G	5147641
2,6-Dinitrotoluene	ND		5	1	08/06/09 18:49	S_G	5147641
2-Chloronaphthalene	ND		5	1	08/06/09 18:49	S_G	5147641
2-Chlorophenol	ND		5	1	08/06/09 18:49	S_G	5147641
2-Methylnaphthalene	ND		5	1	08/06/09 18:49	S_G	5147641
2-Nitroaniline	ND		25	1	08/06/09 18:49	S_G	5147641
2-Nitrophenol	ND		5	1	08/06/09 18:49	S_G	5147641
3,3'-Dichlorobenzidine	ND		10	1	08/06/09 18:49	S_G	5147641
3-Nitroaniline	ND		25	1	08/06/09 18:49	S_G	5147641
4,6-Dinitro-2-methylphenol	ND		25	1	08/06/09 18:49	S_G	5147641
4-Bromophenyl phenyl ether	ND		5	1	08/06/09 18:49	S_G	5147641
4-Chloro-3-methylphenol	ND		5	1	08/06/09 18:49	S_G	5147641
4-Chloroaniline	ND		5	1	08/06/09 18:49	S_G	5147641
4-Chlorophenyl phenyl ether	ND		5	1	08/06/09 18:49	S_G	5147641
4-Nitroaniline	ND		25	1	08/06/09 18:49	S_G	5147641
4-Nitrophenol	ND		25	1	08/06/09 18:49	S_G	5147641
Acenaphthene	ND		5	1	08/06/09 18:49	S_G	5147641
Acenaphthylene	ND		5	1	08/06/09 18:49	S_G	5147641
Aniline	ND		5	1	08/06/09 18:49	S_G	5147641
Anthracene	ND		5	1	08/06/09 18:49	S_G	5147641
Benz(a)anthracene	ND		5	1	08/06/09 18:49	S_G	5147641
Benzo(a)pyrene	ND		5	1	08/06/09 18:49	S_G	5147641
Benzo(b)fluoranthene	ND		5	1	08/06/09 18:49	S_G	5147641
Benzo(g,h,i)perylene	ND		5	1	08/06/09 18:49	S_G	5147641
Benzo(k)fluoranthene	ND		5	1	08/06/09 18:49	S_G	5147641
Benzoic acid	ND		25	1	08/06/09 18:49	S_G	5147641
Benzyl alcohol	ND		5	1	08/06/09 18:49	S_G	5147641
Bis(2-chloroethoxy)methane	ND		5	1	08/06/09 18:49	S_G	5147641
Bis(2-chloroethyl)ether	ND		5	1	08/06/09 18:49	S_G	5147641

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

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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: MW-1

Collected: 07/28/2009 9:10

SPL Sample ID: 09071498-01

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	08/06/09 18:49	S_G	5147641
Bis(2-ethylhexyl)phthalate	ND		5	1	08/06/09 18:49	S_G	5147641
Butyl benzyl phthalate	ND		5	1	08/06/09 18:49	S_G	5147641
Carbazole	ND		5	1	08/06/09 18:49	S_G	5147641
Chrysene	ND		5	1	08/06/09 18:49	S_G	5147641
Dibenz(a,h)anthracene	ND		5	1	08/06/09 18:49	S_G	5147641
Dibenzofuran	ND		5	1	08/06/09 18:49	S_G	5147641
Diethyl phthalate	ND		5	1	08/06/09 18:49	S_G	5147641
Dimethyl phthalate	ND		5	1	08/06/09 18:49	S_G	5147641
Di-n-butyl phthalate	ND		5	1	08/06/09 18:49	S_G	5147641
Di-n-octyl phthalate	ND		5	1	08/06/09 18:49	S_G	5147641
Fluoranthene	ND		5	1	08/06/09 18:49	S_G	5147641
Fluorene	ND		5	1	08/06/09 18:49	S_G	5147641
Hexachlorobenzene	ND		5	1	08/06/09 18:49	S_G	5147641
Hexachlorobutadiene	ND		5	1	08/06/09 18:49	S_G	5147641
Hexachlorocyclopentadiene	ND		5	1	08/06/09 18:49	S_G	5147641
Hexachloroethane	ND		5	1	08/06/09 18:49	S_G	5147641
Indeno(1,2,3-cd)pyrene	ND		5	1	08/06/09 18:49	S_G	5147641
Isophorone	ND		5	1	08/06/09 18:49	S_G	5147641
Naphthalene	ND		5	1	08/06/09 18:49	S_G	5147641
Nitrobenzene	ND		5	1	08/06/09 18:49	S_G	5147641
N-Nitrosodi-n-propylamine	ND		5	1	08/06/09 18:49	S_G	5147641
N-Nitrosodiphenylamine	ND		5	1	08/06/09 18:49	S_G	5147641
Pentachlorophenol	ND		25	1	08/06/09 18:49	S_G	5147641
Phenanthrene	ND		5	1	08/06/09 18:49	S_G	5147641
Phenol	ND		5	1	08/06/09 18:49	S_G	5147641
Pyrene	ND		5	1	08/06/09 18:49	S_G	5147641
Pyridine	ND		5	1	08/06/09 18:49	S_G	5147641
2-Methylphenol	ND		5	1	08/06/09 18:49	S_G	5147641
3 & 4-Methylphenol	ND		5	1	08/06/09 18:49	S_G	5147641
Surr: 2,4,6-Tribromophenol	80.7		% 10-123	1	08/06/09 18:49	S_G	5147641
Surr: 2-Fluorobiphenyl	87.4		% 23-116	1	08/06/09 18:49	S_G	5147641
Surr: 2-Fluorophenol	55.5		% 16-110	1	08/06/09 18:49	S_G	5147641
Surr: Nitrobenzene-d5	80.8		% 21-114	1	08/06/09 18:49	S_G	5147641
Surr: Phenol-d5	40.4		% 10-110	1	08/06/09 18:49	S_G	5147641
Surr: Terphenyl-d14	68.4		% 22-141	1	08/06/09 18:49	S_G	5147641

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/30/2009 12:10	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)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

09071498 Page 6

8/10/2009 4:29:14 PM



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

Client Sample ID: MW-1

Collected: 07/28/2009 9:10

SPL Sample ID: 09071498-01

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	E120.1	Units: umhos/cm	
Specific Conductance	771		10	1	07/29/09 16:30	PAC	5134282
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	750		10	1	07/29/09 16:00	CFS	5135074

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

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

Client Sample ID: MW-1

Collected: 07/28/2009 9:10

SPL Sample ID: 09071498-01

Site: Rio Arriba County

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	08/04/09 14:26	JC	5144280
1,1,1-Trichloroethane	ND		5	1	08/04/09 14:26	JC	5144280
1,1,2,2-Tetrachloroethane	ND		5	1	08/04/09 14:26	JC	5144280
1,1,2-Trichloroethane	ND		5	1	08/04/09 14:26	JC	5144280
1,1-Dichloroethane	ND		5	1	08/04/09 14:26	JC	5144280
1,1-Dichloroethene	ND		5	1	08/04/09 14:26	JC	5144280
1,1-Dichloropropene	ND		5	1	08/04/09 14:26	JC	5144280
1,2,3-Trichlorobenzene	ND		5	1	08/04/09 14:26	JC	5144280
1,2,3-Trichloropropane	ND		5	1	08/04/09 14:26	JC	5144280
1,2,4-Trichlorobenzene	ND		5	1	08/04/09 14:26	JC	5144280
1,2,4-Trimethylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
1,2-Dibromo-3-chloropropane	ND		5	1	08/04/09 14:26	JC	5144280
1,2-Dibromoethane	ND		5	1	08/04/09 14:26	JC	5144280
1,2-Dichlorobenzene	ND		5	1	08/04/09 14:26	JC	5144280
1,2-Dichloroethane	ND		5	1	08/04/09 14:26	JC	5144280
1,2-Dichloropropane	ND		5	1	08/04/09 14:26	JC	5144280
1,3,5-Trimethylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
1,3-Dichlorobenzene	ND		5	1	08/04/09 14:26	JC	5144280
1,3-Dichloropropane	ND		5	1	08/04/09 14:26	JC	5144280
1,4-Dichlorobenzene	ND		5	1	08/04/09 14:26	JC	5144280
2,2-Dichloropropane	ND		5	1	08/04/09 14:26	JC	5144280
2-Butanone	ND		20	1	08/04/09 14:26	JC	5144280
2-Chloroethyl vinyl ether	ND J		10	1	08/04/09 14:26	JC	5144280
2-Chlorotoluene	ND		5	1	08/04/09 14:26	JC	5144280
2-Hexanone	ND		10	1	08/04/09 14:26	JC	5144280
4-Chlorotoluene	ND		5	1	08/04/09 14:26	JC	5144280
4-Isopropyltoluene	ND		5	1	08/04/09 14:26	JC	5144280
4-Methyl-2-pentanone	ND		10	1	08/04/09 14:26	JC	5144280
Acetone	ND		20	1	08/04/09 14:26	JC	5144280
Acrylonitrile	ND		10	1	08/04/09 14:26	JC	5144280
Benzene	ND		5	1	08/04/09 14:26	JC	5144280
Bromobenzene	ND		5	1	08/04/09 14:26	JC	5144280
Bromochloromethane	ND		5	1	08/04/09 14:26	JC	5144280
Bromodichloromethane	ND		5	1	08/04/09 14:26	JC	5144280
Bromoform	ND		5	1	08/04/09 14:26	JC	5144280
Bromomethane	ND		10	1	08/04/09 14:26	JC	5144280
Carbon disulfide	ND		5	1	08/04/09 14:26	JC	5144280
Carbon tetrachloride	ND		5	1	08/04/09 14:26	JC	5144280
Chlorobenzene	ND		5	1	08/04/09 14:26	JC	5144280

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: 07/28/2009 9:10

SPL Sample ID: 09071498-01

Site: Rio Ariba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	08/04/09 14:26	JC	5144280
Chloroform	ND		5	1	08/04/09 14:26	JC	5144280
Chloromethane	ND		10	1	08/04/09 14:26	JC	5144280
Dibromochloromethane	ND		5	1	08/04/09 14:26	JC	5144280
Dibromomethane	ND		5	1	08/04/09 14:26	JC	5144280
Dichlorodifluoromethane	ND		10	1	08/04/09 14:26	JC	5144280
Ethylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
Hexachlorobutadiene	ND		5	1	08/04/09 14:26	JC	5144280
Isopropylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
Methyl tert-butyl ether	ND		5	1	08/04/09 14:26	JC	5144280
Methylene chloride	ND		5	1	08/04/09 14:26	JC	5144280
Naphthalene	ND		5	1	08/04/09 14:26	JC	5144280
n-Butylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
n-Propylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
sec-Butylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
Styrene	ND		5	1	08/04/09 14:26	JC	5144280
tert-Butylbenzene	ND		5	1	08/04/09 14:26	JC	5144280
Tetrachloroethene	ND		5	1	08/04/09 14:26	JC	5144280
Toluene	ND		5	1	08/04/09 14:26	JC	5144280
Trichloroethene	ND		5	1	08/04/09 14:26	JC	5144280
Trichlorofluoromethane	ND		5	1	08/04/09 14:26	JC	5144280
Vinyl acetate	ND		10	1	08/04/09 14:26	JC	5144280
Vinyl chloride	ND		2	1	08/04/09 14:26	JC	5144280
cis-1,2-Dichloroethene	ND		5	1	08/04/09 14:26	JC	5144280
cis-1,3-Dichloropropene	ND		5	1	08/04/09 14:26	JC	5144280
m,p-Xylene	ND		5	1	08/04/09 14:26	JC	5144280
o-Xylene	ND		5	1	08/04/09 14:26	JC	5144280
trans-1,2-Dichloroethene	ND		5	1	08/04/09 14:26	JC	5144280
trans-1,3-Dichloropropene	ND		5	1	08/04/09 14:26	JC	5144280
1,2-Dichloroethene (total)	ND		5	1	08/04/09 14:26	JC	5144280
Xylenes, Total	ND		5	1	08/04/09 14:26	JC	5144280
Surr: 1,2-Dichloroethane-d4	103		% 78-116	1	08/04/09 14:26	JC	5144280
Surr: 4-Bromofluorobenzene	91.0		% 74-125	1	08/04/09 14:26	JC	5144280
Surr: Toluene-d8	108		% 82-118	1	08/04/09 14:26	JC	5144280

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: 07/28/2009 9:35

SPL Sample ID: 09071498-02

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL				MCL	E310.1	Units: mg/L	
Alkalinity, Total (As CaCO ₃)	317		2	1	07/30/09 8:45	PAC	5134859
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	0.16		0.1	1	08/01/09 19:01	NW	5138979
Surr: n-Pentacosane	84.6		% 20-150	1	08/01/09 19:01	NW	5138979
Prep Method	Prep Date	Prep Initials	Prep Factor				
SW3510C	07/30/2009 8:31	N_M	1.00				
GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	07/31/09 7:32	CLJ	5137530
Surr: 1,4-Difluorobenzene	95.8		% 60-155	1	07/31/09 7:32	CLJ	5137530
Surr: 4-Bromofluorobenzene	104		% 50-158	1	07/31/09 7:32	CLJ	5137530
HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO ₃)	132		10	2	07/29/09 16:00	PAC	5134270
ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	07/29/09 14:46	BDG	5134941
Chloride	4.46		0.5	1	07/29/09 14:46	BDG	5134941
Fluoride	ND		0.5	1	07/29/09 14:46	BDG	5134941
Ortho-phosphate (As P)	ND		0.5	1	08/03/09 19:47	BDG	5141476
Sulfate	65.8		5	10	08/03/09 20:05	BDG	5141477
Nitrogen, Nitrate (As N)	ND		0.5	1	07/29/09 14:46	BDG	5134920
Nitrogen, Nitrite (As N)	ND		0.5	1	07/29/09 14:46	BDG	5134920
PH				MCL	SM4500-H B	Units: pH Units	
pH	7.47		0.1	1	07/29/09 14:30	PAC	5134250

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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: 07/28/2009 9:35

SPL Sample ID: 09071498-02

Site: Rio Arriba County

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	08/06/09 19:25	S_G	5147642
1,2-Dichlorobenzene	ND		5	1	08/06/09 19:25	S_G	5147642
1,2-Diphenylhydrazine	ND		10	1	08/06/09 19:25	S_G	5147642
1,3-Dichlorobenzene	ND		5	1	08/06/09 19:25	S_G	5147642
1,4-Dichlorobenzene	ND		5	1	08/06/09 19:25	S_G	5147642
2,4,5-Trichlorophenol	ND		10	1	08/06/09 19:25	S_G	5147642
2,4,6-Trichlorophenol	ND		5	1	08/06/09 19:25	S_G	5147642
2,4-Dichlorophenol	ND		5	1	08/06/09 19:25	S_G	5147642
2,4-Dimethylphenol	ND		5	1	08/06/09 19:25	S_G	5147642
2,4-Dinitrophenol	ND		25	1	08/06/09 19:25	S_G	5147642
2,4-Dinitrotoluene	ND		5	1	08/06/09 19:25	S_G	5147642
2,6-Dinitrotoluene	ND		5	1	08/06/09 19:25	S_G	5147642
2-Chloronaphthalene	ND		5	1	08/06/09 19:25	S_G	5147642
2-Chlorophenol	ND		5	1	08/06/09 19:25	S_G	5147642
2-Methylnaphthalene	ND		5	1	08/06/09 19:25	S_G	5147642
2-Nitroaniline	ND		25	1	08/06/09 19:25	S_G	5147642
2-Nitrophenol	ND		5	1	08/06/09 19:25	S_G	5147642
3,3'-Dichlorobenzidine	ND		10	1	08/06/09 19:25	S_G	5147642
3-Nitroaniline	ND		25	1	08/06/09 19:25	S_G	5147642
4,6-Dinitro-2-methylphenol	ND		25	1	08/06/09 19:25	S_G	5147642
4-Bromophenyl phenyl ether	ND		5	1	08/06/09 19:25	S_G	5147642
4-Chloro-3-methylphenol	ND		5	1	08/06/09 19:25	S_G	5147642
4-Chloroaniline	ND		5	1	08/06/09 19:25	S_G	5147642
4-Chlorophenyl phenyl ether	ND		5	1	08/06/09 19:25	S_G	5147642
4-Nitroaniline	ND		25	1	08/06/09 19:25	S_G	5147642
4-Nitrophenol	ND		25	1	08/06/09 19:25	S_G	5147642
Acenaphthene	ND		5	1	08/06/09 19:25	S_G	5147642
Acenaphthylene	ND		5	1	08/06/09 19:25	S_G	5147642
Aniline	ND		5	1	08/06/09 19:25	S_G	5147642
Anthracene	ND		5	1	08/06/09 19:25	S_G	5147642
Benz(a)anthracene	ND		5	1	08/06/09 19:25	S_G	5147642
Benzo(a)pyrene	ND		5	1	08/06/09 19:25	S_G	5147642
Benzo(b)fluoranthene	ND		5	1	08/06/09 19:25	S_G	5147642
Benzo(g,h,i)perylene	ND		5	1	08/06/09 19:25	S_G	5147642
Benzo(k)fluoranthene	ND		5	1	08/06/09 19:25	S_G	5147642
Benzoic acid	ND		25	1	08/06/09 19:25	S_G	5147642
Benzyl alcohol	ND		5	1	08/06/09 19:25	S_G	5147642
Bis(2-chloroethoxy)methane	ND		5	1	08/06/09 19:25	S_G	5147642
Bis(2-chloroethyl)ether	ND		5	1	08/06/09 19:25	S_G	5147642

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

Client Sample ID: MW-3

Collected: 07/28/2009 9:35

SPL Sample ID: 09071498-02

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	08/06/09 19:25	S_G	5147642
Bis(2-ethylhexyl)phthalate	ND		5	1	08/06/09 19:25	S_G	5147642
Butyl benzyl phthalate	ND		5	1	08/06/09 19:25	S_G	5147642
Carbazole	ND		5	1	08/06/09 19:25	S_G	5147642
Chrysene	ND		5	1	08/06/09 19:25	S_G	5147642
Dibenz(a,h)anthracene	ND		5	1	08/06/09 19:25	S_G	5147642
Dibenzofuran	ND		5	1	08/06/09 19:25	S_G	5147642
Diethyl phthalate	ND		5	1	08/06/09 19:25	S_G	5147642
Dimethyl phthalate	ND		5	1	08/06/09 19:25	S_G	5147642
Di-n-butyl phthalate	ND		5	1	08/06/09 19:25	S_G	5147642
Di-n-octyl phthalate	ND		5	1	08/06/09 19:25	S_G	5147642
Fluoranthene	ND		5	1	08/06/09 19:25	S_G	5147642
Fluorene	ND		5	1	08/06/09 19:25	S_G	5147642
Hexachlorobenzene	ND		5	1	08/06/09 19:25	S_G	5147642
Hexachlorobutadiene	ND		5	1	08/06/09 19:25	S_G	5147642
Hexachlorocyclopentadiene	ND		5	1	08/06/09 19:25	S_G	5147642
Hexachloroethane	ND		5	1	08/06/09 19:25	S_G	5147642
Indeno(1,2,3-cd)pyrene	ND		5	1	08/06/09 19:25	S_G	5147642
Isophorone	ND		5	1	08/06/09 19:25	S_G	5147642
Naphthalene	ND		5	1	08/06/09 19:25	S_G	5147642
Nitrobenzene	ND		5	1	08/06/09 19:25	S_G	5147642
N-Nitrosodi-n-propylamine	ND		5	1	08/06/09 19:25	S_G	5147642
N-Nitrosodiphenylamine	ND		5	1	08/06/09 19:25	S_G	5147642
Pentachlorophenol	ND		25	1	08/06/09 19:25	S_G	5147642
Phenanthrene	ND		5	1	08/06/09 19:25	S_G	5147642
Phenol	ND		5	1	08/06/09 19:25	S_G	5147642
Pyrene	ND		5	1	08/06/09 19:25	S_G	5147642
Pyridine	ND		5	1	08/06/09 19:25	S_G	5147642
2-Methylphenol	ND		5	1	08/06/09 19:25	S_G	5147642
3 & 4-Methylphenol	ND		5	1	08/06/09 19:25	S_G	5147642
Surr: 2,4,6-Tribromophenol	79.2		% 10-123	1	08/06/09 19:25	S_G	5147642
Surr: 2-Fluorobiphenyl	91.2		% 23-116	1	08/06/09 19:25	S_G	5147642
Surr: 2-Fluorophenol	54.3		% 16-110	1	08/06/09 19:25	S_G	5147642
Surr: Nitrobenzene-d5	86.6		% 21-114	1	08/06/09 19:25	S_G	5147642
Surr: Phenol-d5	40.9		% 10-110	1	08/06/09 19:25	S_G	5147642
Surr: Terphenyl-d14	75.2		% 22-141	1	08/06/09 19:25	S_G	5147642

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/30/2009 12:10	N_M	1.00

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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-3

Collected: 07/28/2009 9:35

SPL Sample ID: 09071498-02

Site: Rio Ariba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	E120.1	Units: umhos/cm	
Specific Conductance	753		10	1	07/29/09 16:30	PAC	5134283
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	622		10	1	07/29/09 16:00	CFS	5135076

Qualifiers:

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

Client Sample ID: MW-3

Collected: 07/28/2009 9:35

SPL Sample ID: 09071498-02

Site: Rio Arriba County

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	08/04/09 14:53	JC	5144281
1,1,1-Trichloroethane	ND		5	1	08/04/09 14:53	JC	5144281
1,1,2,2-Tetrachloroethane	ND		5	1	08/04/09 14:53	JC	5144281
1,1,2-Trichloroethane	ND		5	1	08/04/09 14:53	JC	5144281
1,1-Dichloroethane	ND		5	1	08/04/09 14:53	JC	5144281
1,1-Dichloroethene	ND		5	1	08/04/09 14:53	JC	5144281
1,1-Dichloropropene	ND		5	1	08/04/09 14:53	JC	5144281
1,2,3-Trichlorobenzene	ND		5	1	08/04/09 14:53	JC	5144281
1,2,3-Trichloropropane	ND		5	1	08/04/09 14:53	JC	5144281
1,2,4-Trichlorobenzene	ND		5	1	08/04/09 14:53	JC	5144281
1,2,4-Trimethylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
1,2-Dibromo-3-chloropropane	ND		5	1	08/04/09 14:53	JC	5144281
1,2-Dibromoethane	ND		5	1	08/04/09 14:53	JC	5144281
1,2-Dichlorobenzene	ND		5	1	08/04/09 14:53	JC	5144281
1,2-Dichloroethane	ND		5	1	08/04/09 14:53	JC	5144281
1,2-Dichloropropane	ND		5	1	08/04/09 14:53	JC	5144281
1,3,5-Trimethylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
1,3-Dichlorobenzene	ND		5	1	08/04/09 14:53	JC	5144281
1,3-Dichloropropane	ND		5	1	08/04/09 14:53	JC	5144281
1,4-Dichlorobenzene	ND		5	1	08/04/09 14:53	JC	5144281
2,2-Dichloropropane	ND		5	1	08/04/09 14:53	JC	5144281
2-Butanone	ND		20	1	08/04/09 14:53	JC	5144281
2-Chloroethyl vinyl ether	ND J		10	1	08/04/09 14:53	JC	5144281
2-Chlorotoluene	ND		5	1	08/04/09 14:53	JC	5144281
2-Hexanone	ND		10	1	08/04/09 14:53	JC	5144281
4-Chlorotoluene	ND		5	1	08/04/09 14:53	JC	5144281
4-Isopropyltoluene	ND		5	1	08/04/09 14:53	JC	5144281
4-Methyl-2-pentanone	ND		10	1	08/04/09 14:53	JC	5144281
Acetone	ND		20	1	08/04/09 14:53	JC	5144281
Acrylonitrile	ND		10	1	08/04/09 14:53	JC	5144281
Benzene	ND		5	1	08/04/09 14:53	JC	5144281
Bromobenzene	ND		5	1	08/04/09 14:53	JC	5144281
Bromochloromethane	ND		5	1	08/04/09 14:53	JC	5144281
Bromodichloromethane	ND		5	1	08/04/09 14:53	JC	5144281
Bromoform	ND		5	1	08/04/09 14:53	JC	5144281
Bromomethane	ND		10	1	08/04/09 14:53	JC	5144281
Carbon disulfide	ND		5	1	08/04/09 14:53	JC	5144281
Carbon tetrachloride	ND		5	1	08/04/09 14:53	JC	5144281
Chlorobenzene	ND		5	1	08/04/09 14:53	JC	5144281

Qualifiers:
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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

Collected: 07/28/2009 9:35

SPL Sample ID: 09071498-02

Site: Rio Ariba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	08/04/09 14:53	JC	5144281
Chloroform	ND		5	1	08/04/09 14:53	JC	5144281
Chloromethane	ND		10	1	08/04/09 14:53	JC	5144281
Dibromochloromethane	ND		5	1	08/04/09 14:53	JC	5144281
Dibromomethane	ND		5	1	08/04/09 14:53	JC	5144281
Dichlorodifluoromethane	ND		10	1	08/04/09 14:53	JC	5144281
Ethylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
Hexachlorobutadiene	ND		5	1	08/04/09 14:53	JC	5144281
Isopropylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
Methyl tert-butyl ether	ND		5	1	08/04/09 14:53	JC	5144281
Methylene chloride	ND		5	1	08/04/09 14:53	JC	5144281
Naphthalene	ND		5	1	08/04/09 14:53	JC	5144281
n-Butylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
n-Propylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
sec-Butylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
Styrene	ND		5	1	08/04/09 14:53	JC	5144281
tert-Butylbenzene	ND		5	1	08/04/09 14:53	JC	5144281
Tetrachloroethene	ND		5	1	08/04/09 14:53	JC	5144281
Toluene	ND		5	1	08/04/09 14:53	JC	5144281
Trichloroethene	ND		5	1	08/04/09 14:53	JC	5144281
Trichlorofluoromethane	ND		5	1	08/04/09 14:53	JC	5144281
Vinyl acetate	ND		10	1	08/04/09 14:53	JC	5144281
Vinyl chloride	ND		2	1	08/04/09 14:53	JC	5144281
cis-1,2-Dichloroethene	ND		5	1	08/04/09 14:53	JC	5144281
cis-1,3-Dichloropropene	ND		5	1	08/04/09 14:53	JC	5144281
m,p-Xylene	ND		5	1	08/04/09 14:53	JC	5144281
o-Xylene	ND		5	1	08/04/09 14:53	JC	5144281
trans-1,2-Dichloroethene	ND		5	1	08/04/09 14:53	JC	5144281
trans-1,3-Dichloropropene	ND		5	1	08/04/09 14:53	JC	5144281
1,2-Dichloroethene (total)	ND		5	1	08/04/09 14:53	JC	5144281
Xylenes, Total	ND		5	1	08/04/09 14:53	JC	5144281
Surr: 1,2-Dichloroethane-d4	102		% 78-116	1	08/04/09 14:53	JC	5144281
Surr: 4-Bromofluorobenzene	91.9		% 74-125	1	08/04/09 14:53	JC	5144281
Surr: Toluene-d8	110		% 82-118	1	08/04/09 14:53	JC	5144281

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: 07/28/2009 9:45

SPL Sample ID: 09071498-03

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO3), TOTAL				MCL	E310.1	Units: mg/L	
Alkalinity, Total (As CaCO3)	333		2	1	07/30/09 8:45	PAC	5134860

DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	0.18		0.1	1	08/01/09 19:22	NW	5138980
Surr: n-Pentacosane	92.0	%	20-150	1	08/01/09 19:22	NW	5138980

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/30/2009 8:31	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	07/31/09 8:00	CLJ	5137531
Surr: 1,4-Difluorobenzene	91.3	%	60-155	1	07/31/09 8:00	CLJ	5137531
Surr: 4-Bromofluorobenzene	104	%	50-158	1	07/31/09 8:00	CLJ	5137531

HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO3)	1050		125	25	07/29/09 16:00	PAC	5134271

ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	07/29/09 15:02	BDG	5134942
Chloride	8.42		0.5	1	07/29/09 15:02	BDG	5134942
Fluoride	0.767		0.5	1	07/29/09 15:02	BDG	5134942
Ortho-phosphate (As P)	ND		0.5	1	08/03/09 20:23	BDG	5141478
Sulfate	103		5	10	08/03/09 20:40	BDG	5141479
Nitrogen, Nitrate (As N)	ND		0.5	1	07/29/09 15:02	BDG	5134921
Nitrogen, Nitrite (As N)	ND		0.5	1	07/29/09 15:02	BDG	5134921

PH				MCL	SM4500-H B	Units: pH Units	
pH	7.92		0.1	1	07/29/09 14:30	PAC	5134251

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)
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: 07/28/2009 9:45

SPL Sample ID: 09071498-03

Site: Rio Arriba County

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	08/06/09 20:01	S_G	5147643
1,2-Dichlorobenzene	ND		5	1	08/06/09 20:01	S_G	5147643
1,2-Diphenylhydrazine	ND		10	1	08/06/09 20:01	S_G	5147643
1,3-Dichlorobenzene	ND		5	1	08/06/09 20:01	S_G	5147643
1,4-Dichlorobenzene	ND		5	1	08/06/09 20:01	S_G	5147643
2,4,5-Trichlorophenol	ND		10	1	08/06/09 20:01	S_G	5147643
2,4,6-Trichlorophenol	ND		5	1	08/06/09 20:01	S_G	5147643
2,4-Dichlorophenol	ND		5	1	08/06/09 20:01	S_G	5147643
2,4-Dimethylphenol	ND		5	1	08/06/09 20:01	S_G	5147643
2,4-Dinitrophenol	ND		25	1	08/06/09 20:01	S_G	5147643
2,4-Dinitrotoluene	ND		5	1	08/06/09 20:01	S_G	5147643
2,6-Dinitrotoluene	ND		5	1	08/06/09 20:01	S_G	5147643
2-Chloronaphthalene	ND		5	1	08/06/09 20:01	S_G	5147643
2-Chlorophenol	ND		5	1	08/06/09 20:01	S_G	5147643
2-Methylnaphthalene	ND		5	1	08/06/09 20:01	S_G	5147643
2-Nitroaniline	ND		25	1	08/06/09 20:01	S_G	5147643
2-Nitrophenol	ND		5	1	08/06/09 20:01	S_G	5147643
3,3'-Dichlorobenzidine	ND		10	1	08/06/09 20:01	S_G	5147643
3-Nitroaniline	ND		25	1	08/06/09 20:01	S_G	5147643
4,6-Dinitro-2-methylphenol	ND		25	1	08/06/09 20:01	S_G	5147643
4-Bromophenyl phenyl ether	ND		5	1	08/06/09 20:01	S_G	5147643
4-Chloro-3-methylphenol	ND		5	1	08/06/09 20:01	S_G	5147643
4-Chloroaniline	ND		5	1	08/06/09 20:01	S_G	5147643
4-Chlorophenyl phenyl ether	ND		5	1	08/06/09 20:01	S_G	5147643
4-Nitroaniline	ND		25	1	08/06/09 20:01	S_G	5147643
4-Nitrophenol	ND		25	1	08/06/09 20:01	S_G	5147643
Acenaphthene	ND		5	1	08/06/09 20:01	S_G	5147643
Acenaphthylene	ND		5	1	08/06/09 20:01	S_G	5147643
Aniline	ND		5	1	08/06/09 20:01	S_G	5147643
Anthracene	ND		5	1	08/06/09 20:01	S_G	5147643
Benz(a)anthracene	ND		5	1	08/06/09 20:01	S_G	5147643
Benzo(a)pyrene	ND		5	1	08/06/09 20:01	S_G	5147643
Benzo(b)fluoranthene	ND		5	1	08/06/09 20:01	S_G	5147643
Benzo(g,h,i)perylene	ND		5	1	08/06/09 20:01	S_G	5147643
Benzo(k)fluoranthene	ND		5	1	08/06/09 20:01	S_G	5147643
Benzoic acid	ND		25	1	08/06/09 20:01	S_G	5147643
Benzyl alcohol	ND		5	1	08/06/09 20:01	S_G	5147643
Bis(2-chloroethoxy)methane	ND		5	1	08/06/09 20:01	S_G	5147643
Bis(2-chloroethyl)ether	ND		5	1	08/06/09 20:01	S_G	5147643

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

>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: 07/28/2009 9:45

SPL Sample ID: 09071498-03

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	08/06/09 20:01	S_G	5147643
Bis(2-ethylhexyl)phthalate	ND		5	1	08/06/09 20:01	S_G	5147643
Butyl benzyl phthalate	ND		5	1	08/06/09 20:01	S_G	5147643
Carbazole	ND		5	1	08/06/09 20:01	S_G	5147643
Chrysene	ND		5	1	08/06/09 20:01	S_G	5147643
Dibenz(a,h)anthracene	ND		5	1	08/06/09 20:01	S_G	5147643
Dibenzofuran	ND		5	1	08/06/09 20:01	S_G	5147643
Diethyl phthalate	ND		5	1	08/06/09 20:01	S_G	5147643
Dimethyl phthalate	ND		5	1	08/06/09 20:01	S_G	5147643
Di-n-butyl phthalate	ND		5	1	08/06/09 20:01	S_G	5147643
Di-n-octyl phthalate	ND		5	1	08/06/09 20:01	S_G	5147643
Fluoranthene	ND		5	1	08/06/09 20:01	S_G	5147643
Fluorene	ND		5	1	08/06/09 20:01	S_G	5147643
Hexachlorobenzene	ND		5	1	08/06/09 20:01	S_G	5147643
Hexachlorobutadiene	ND		5	1	08/06/09 20:01	S_G	5147643
Hexachlorocyclopentadiene	ND		5	1	08/06/09 20:01	S_G	5147643
Hexachloroethane	ND		5	1	08/06/09 20:01	S_G	5147643
Indeno(1,2,3-cd)pyrene	ND		5	1	08/06/09 20:01	S_G	5147643
Isophorone	ND		5	1	08/06/09 20:01	S_G	5147643
Naphthalene	ND		5	1	08/06/09 20:01	S_G	5147643
Nitrobenzene	ND		5	1	08/06/09 20:01	S_G	5147643
N-Nitrosodi-n-propylamine	ND		5	1	08/06/09 20:01	S_G	5147643
N-Nitrosodiphenylamine	ND		5	1	08/06/09 20:01	S_G	5147643
Pentachlorophenol	ND		25	1	08/06/09 20:01	S_G	5147643
Phenanthrene	ND		5	1	08/06/09 20:01	S_G	5147643
Phenol	ND		5	1	08/06/09 20:01	S_G	5147643
Pyrene	ND		5	1	08/06/09 20:01	S_G	5147643
Pyridine	ND		5	1	08/06/09 20:01	S_G	5147643
2-Methylphenol	ND		5	1	08/06/09 20:01	S_G	5147643
3 & 4-Methylphenol	ND		5	1	08/06/09 20:01	S_G	5147643
Surr: 2,4,6-Tribromophenol	80.8		% 10-123	1	08/06/09 20:01	S_G	5147643
Surr: 2-Fluorobiphenyl	78.6		% 23-116	1	08/06/09 20:01	S_G	5147643
Surr: 2-Fluorophenol	51.9		% 16-110	1	08/06/09 20:01	S_G	5147643
Surr: Nitrobenzene-d5	68.2		% 21-114	1	08/06/09 20:01	S_G	5147643
Surr: Phenol-d5	42.1		% 10-110	1	08/06/09 20:01	S_G	5147643
Surr: Terphenyl-d14	70.6		% 22-141	1	08/06/09 20:01	S_G	5147643

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/30/2009 12:10	N_M	1.00

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)
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: 07/28/2009 9:45

SPL Sample ID: 09071498-03

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	E120.1	Units: umhos/cm	
Specific Conductance	899		10	1	07/29/09 16:30	PAC	5134284
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	1660		40	4	07/29/09 16:00	CFS	5135077

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

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D - Surrogate Recovery Unreportable due to Dilution

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8/10/2009 4:29:19 PM



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

Client Sample ID: MW-4

Collected: 07/28/2009 9:45

SPL Sample ID: 09071498-03

Site: Rio Arriba County

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	08/04/09 15:20	JC	5144282
1,1,1-Trichloroethane	ND		5	1	08/04/09 15:20	JC	5144282
1,1,2,2-Tetrachloroethane	ND		5	1	08/04/09 15:20	JC	5144282
1,1,2-Trichloroethane	ND		5	1	08/04/09 15:20	JC	5144282
1,1-Dichloroethane	ND		5	1	08/04/09 15:20	JC	5144282
1,1-Dichloroethene	ND		5	1	08/04/09 15:20	JC	5144282
1,1-Dichloropropene	ND		5	1	08/04/09 15:20	JC	5144282
1,2,3-Trichlorobenzene	ND		5	1	08/04/09 15:20	JC	5144282
1,2,3-Trichloropropane	ND		5	1	08/04/09 15:20	JC	5144282
1,2,4-Trichlorobenzene	ND		5	1	08/04/09 15:20	JC	5144282
1,2,4-Trimethylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
1,2-Dibromo-3-chloropropane	ND		5	1	08/04/09 15:20	JC	5144282
1,2-Dibromoethane	ND		5	1	08/04/09 15:20	JC	5144282
1,2-Dichlorobenzene	ND		5	1	08/04/09 15:20	JC	5144282
1,2-Dichloroethane	ND		5	1	08/04/09 15:20	JC	5144282
1,2-Dichloropropane	ND		5	1	08/04/09 15:20	JC	5144282
1,3,5-Trimethylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
1,3-Dichlorobenzene	ND		5	1	08/04/09 15:20	JC	5144282
1,3-Dichloropropane	ND		5	1	08/04/09 15:20	JC	5144282
1,4-Dichlorobenzene	ND		5	1	08/04/09 15:20	JC	5144282
2,2-Dichloropropane	ND		5	1	08/04/09 15:20	JC	5144282
2-Butanone	ND		20	1	08/04/09 15:20	JC	5144282
2-Chloroethyl vinyl ether	ND J		10	1	08/04/09 15:20	JC	5144282
2-Chlorotoluene	ND		5	1	08/04/09 15:20	JC	5144282
2-Hexanone	ND		10	1	08/04/09 15:20	JC	5144282
4-Chlorotoluene	ND		5	1	08/04/09 15:20	JC	5144282
4-Isopropyltoluene	ND		5	1	08/04/09 15:20	JC	5144282
4-Methyl-2-pentanone	ND		10	1	08/04/09 15:20	JC	5144282
Acetone	ND		20	1	08/04/09 15:20	JC	5144282
Acrylonitrile	ND		10	1	08/04/09 15:20	JC	5144282
Benzene	ND		5	1	08/04/09 15:20	JC	5144282
Bromobenzene	ND		5	1	08/04/09 15:20	JC	5144282
Bromochloromethane	ND		5	1	08/04/09 15:20	JC	5144282
Bromodichloromethane	ND		5	1	08/04/09 15:20	JC	5144282
Bromoform	ND		5	1	08/04/09 15:20	JC	5144282
Bromomethane	ND		10	1	08/04/09 15:20	JC	5144282
Carbon disulfide	ND		5	1	08/04/09 15:20	JC	5144282
Carbon tetrachloride	ND		5	1	08/04/09 15:20	JC	5144282
Chlorobenzene	ND		5	1	08/04/09 15:20	JC	5144282

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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MI - Matrix Interference



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

Client Sample ID: MW-4

Collected: 07/28/2009 9:45

SPL Sample ID: 09071498-03

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	08/04/09 15:20	JC	5144282
Chloroform	ND		5	1	08/04/09 15:20	JC	5144282
Chloromethane	ND		10	1	08/04/09 15:20	JC	5144282
Dibromochloromethane	ND		5	1	08/04/09 15:20	JC	5144282
Dibromomethane	ND		5	1	08/04/09 15:20	JC	5144282
Dichlorodifluoromethane	ND		10	1	08/04/09 15:20	JC	5144282
Ethylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
Hexachlorobutadiene	ND		5	1	08/04/09 15:20	JC	5144282
Isopropylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
Methyl tert-butyl ether	ND		5	1	08/04/09 15:20	JC	5144282
Methylene chloride	ND		5	1	08/04/09 15:20	JC	5144282
Naphthalene	ND		5	1	08/04/09 15:20	JC	5144282
n-Butylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
n-Propylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
sec-Butylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
Styrene	ND		5	1	08/04/09 15:20	JC	5144282
tert-Butylbenzene	ND		5	1	08/04/09 15:20	JC	5144282
Tetrachloroethene	ND		5	1	08/04/09 15:20	JC	5144282
Toluene	ND		5	1	08/04/09 15:20	JC	5144282
Trichloroethene	ND		5	1	08/04/09 15:20	JC	5144282
Trichlorofluoromethane	ND		5	1	08/04/09 15:20	JC	5144282
Vinyl acetate	ND		10	1	08/04/09 15:20	JC	5144282
Vinyl chloride	ND		2	1	08/04/09 15:20	JC	5144282
cis-1,2-Dichloroethene	ND		5	1	08/04/09 15:20	JC	5144282
cis-1,3-Dichloropropene	ND		5	1	08/04/09 15:20	JC	5144282
m,p-Xylene	ND		5	1	08/04/09 15:20	JC	5144282
o-Xylene	ND		5	1	08/04/09 15:20	JC	5144282
trans-1,2-Dichloroethene	ND		5	1	08/04/09 15:20	JC	5144282
trans-1,3-Dichloropropene	ND		5	1	08/04/09 15:20	JC	5144282
1,2-Dichloroethene (total)	ND		5	1	08/04/09 15:20	JC	5144282
Xylenes, Total	ND		5	1	08/04/09 15:20	JC	5144282
Surr: 1,2-Dichloroethane-d4	101		% 78-116	1	08/04/09 15:20	JC	5144282
Surr: 4-Bromofluorobenzene	92.4		% 74-125	1	08/04/09 15:20	JC	5144282
Surr: Toluene-d8	110		% 82-118	1	08/04/09 15:20	JC	5144282

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: 07/28/2009 10:30

SPL Sample ID: 09071498-04

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL				MCL	E310.1	Units: mg/L	
Alkalinity, Total (As CaCO ₃)	296		2	1	07/30/09 8:45	PAC	5134862
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	0.19		0.1	1	08/01/09 19:42	NW	5138981
Surr: n-Pentacosane	81.4	%	20-150	1	08/01/09 19:42	NW	5138981
Prep Method	Prep Date	Prep Initials	Prep Factor				
SW3510C	07/30/2009 8:31	N_M	1.00				
GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	07/31/09 8:29	CLJ	5137532
Surr: 1,4-Difluorobenzene	90.8	%	60-155	1	07/31/09 8:29	CLJ	5137532
Surr: 4-Bromofluorobenzene	103	%	50-158	1	07/31/09 8:29	CLJ	5137532
HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO ₃)	116		10	2	07/29/09 16:00	PAC	5134272
ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	07/29/09 15:19	BDG	5134943
Chloride	11.1		0.5	1	07/29/09 15:19	BDG	5134943
Fluoride	0.613		0.5	1	07/29/09 15:19	BDG	5134943
Ortho-phosphate (As P)	ND		0.5	1	08/03/09 20:58	BDG	5141481
Sulfate	81.4		5	10	08/03/09 21:16	BDG	5141482
Nitrogen, Nitrate (As N)	ND		0.5	1	07/29/09 15:19	BDG	5134922
Nitrogen, Nitrite (As N)	ND		0.5	1	07/29/09 15:19	BDG	5134922
PH				MCL	SM4500-H B	Units: pH Units	
pH	7.92		0.1	1	07/29/09 14:30	PAC	5134252

Qualifiers:
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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)
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: 07/28/2009 10:30

SPL Sample ID: 09071498-04

Site: Rio Arriba County

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	08/06/09 20:37	S_G	5147644
1,2-Dichlorobenzene	ND		5	1	08/06/09 20:37	S_G	5147644
1,2-Diphenylhydrazine	ND		10	1	08/06/09 20:37	S_G	5147644
1,3-Dichlorobenzene	ND		5	1	08/06/09 20:37	S_G	5147644
1,4-Dichlorobenzene	ND		5	1	08/06/09 20:37	S_G	5147644
2,4,5-Trichlorophenol	ND		10	1	08/06/09 20:37	S_G	5147644
2,4,6-Trichlorophenol	ND		5	1	08/06/09 20:37	S_G	5147644
2,4-Dichlorophenol	ND		5	1	08/06/09 20:37	S_G	5147644
2,4-Dimethylphenol	ND		5	1	08/06/09 20:37	S_G	5147644
2,4-Dinitrophenol	ND		25	1	08/06/09 20:37	S_G	5147644
2,4-Dinitrotoluene	ND		5	1	08/06/09 20:37	S_G	5147644
2,6-Dinitrotoluene	ND		5	1	08/06/09 20:37	S_G	5147644
2-Chloronaphthalene	ND		5	1	08/06/09 20:37	S_G	5147644
2-Chlorophenol	ND		5	1	08/06/09 20:37	S_G	5147644
2-Methylnaphthalene	ND		5	1	08/06/09 20:37	S_G	5147644
2-Nitroaniline	ND		25	1	08/06/09 20:37	S_G	5147644
2-Nitrophenol	ND		5	1	08/06/09 20:37	S_G	5147644
3,3'-Dichlorobenzidine	ND		10	1	08/06/09 20:37	S_G	5147644
3-Nitroaniline	ND		25	1	08/06/09 20:37	S_G	5147644
4,6-Dinitro-2-methylphenol	ND		25	1	08/06/09 20:37	S_G	5147644
4-Bromophenyl phenyl ether	ND		5	1	08/06/09 20:37	S_G	5147644
4-Chloro-3-methylphenol	ND		5	1	08/06/09 20:37	S_G	5147644
4-Chloroaniline	ND		5	1	08/06/09 20:37	S_G	5147644
4-Chlorophenyl phenyl ether	ND		5	1	08/06/09 20:37	S_G	5147644
4-Nitroaniline	ND		25	1	08/06/09 20:37	S_G	5147644
4-Nitrophenol	ND		25	1	08/06/09 20:37	S_G	5147644
Acenaphthene	ND		5	1	08/06/09 20:37	S_G	5147644
Acenaphthylene	ND		5	1	08/06/09 20:37	S_G	5147644
Aniline	ND		5	1	08/06/09 20:37	S_G	5147644
Anthracene	ND		5	1	08/06/09 20:37	S_G	5147644
Benz(a)anthracene	ND		5	1	08/06/09 20:37	S_G	5147644
Benzo(a)pyrene	ND		5	1	08/06/09 20:37	S_G	5147644
Benzo(b)fluoranthene	ND		5	1	08/06/09 20:37	S_G	5147644
Benzo(g,h,i)perylene	ND		5	1	08/06/09 20:37	S_G	5147644
Benzo(k)fluoranthene	ND		5	1	08/06/09 20:37	S_G	5147644
Benzoic acid	ND		25	1	08/06/09 20:37	S_G	5147644
Benzyl alcohol	ND		5	1	08/06/09 20:37	S_G	5147644
Bis(2-chloroethoxy)methane	ND		5	1	08/06/09 20:37	S_G	5147644
Bis(2-chloroethyl)ether	ND		5	1	08/06/09 20:37	S_G	5147644

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

Client Sample ID: MW-2

Collected: 07/28/2009 10:30

SPL Sample ID: 09071498-04

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	08/06/09 20:37	S_G	5147644
Bis(2-ethylhexyl)phthalate	ND		5	1	08/06/09 20:37	S_G	5147644
Butyl benzyl phthalate	ND		5	1	08/06/09 20:37	S_G	5147644
Carbazole	ND		5	1	08/06/09 20:37	S_G	5147644
Chrysene	ND		5	1	08/06/09 20:37	S_G	5147644
Dibenz(a,h)anthracene	ND		5	1	08/06/09 20:37	S_G	5147644
Dibenzofuran	ND		5	1	08/06/09 20:37	S_G	5147644
Diethyl phthalate	ND		5	1	08/06/09 20:37	S_G	5147644
Dimethyl phthalate	ND		5	1	08/06/09 20:37	S_G	5147644
Di-n-butyl phthalate	ND		5	1	08/06/09 20:37	S_G	5147644
Di-n-octyl phthalate	ND		5	1	08/06/09 20:37	S_G	5147644
Fluoranthene	ND		5	1	08/06/09 20:37	S_G	5147644
Fluorene	ND		5	1	08/06/09 20:37	S_G	5147644
Hexachlorobenzene	ND		5	1	08/06/09 20:37	S_G	5147644
Hexachlorobutadiene	ND		5	1	08/06/09 20:37	S_G	5147644
Hexachlorocyclopentadiene	ND		5	1	08/06/09 20:37	S_G	5147644
Hexachloroethane	ND		5	1	08/06/09 20:37	S_G	5147644
Indeno(1,2,3-cd)pyrene	ND		5	1	08/06/09 20:37	S_G	5147644
Isophorone	ND		5	1	08/06/09 20:37	S_G	5147644
Naphthalene	ND		5	1	08/06/09 20:37	S_G	5147644
Nitrobenzene	ND		5	1	08/06/09 20:37	S_G	5147644
N-Nitrosodi-n-propylamine	ND		5	1	08/06/09 20:37	S_G	5147644
N-Nitrosodiphenylamine	ND		5	1	08/06/09 20:37	S_G	5147644
Pentachlorophenol	ND		25	1	08/06/09 20:37	S_G	5147644
Phenanthrene	ND		5	1	08/06/09 20:37	S_G	5147644
Phenol	ND		5	1	08/06/09 20:37	S_G	5147644
Pyrene	ND		5	1	08/06/09 20:37	S_G	5147644
Pyridine	ND		5	1	08/06/09 20:37	S_G	5147644
2-Methylphenol	ND		5	1	08/06/09 20:37	S_G	5147644
3 & 4-Methylphenol	ND		5	1	08/06/09 20:37	S_G	5147644
Surr: 2,4,6-Tribromophenol	81.5		% 10-123	1	08/06/09 20:37	S_G	5147644
Surr: 2-Fluorobiphenyl	89.2		% 23-116	1	08/06/09 20:37	S_G	5147644
Surr: 2-Fluorophenol	58.9		% 16-110	1	08/06/09 20:37	S_G	5147644
Surr: Nitrobenzene-d5	81.8		% 21-114	1	08/06/09 20:37	S_G	5147644
Surr: Phenol-d5	45.2		% 10-110	1	08/06/09 20:37	S_G	5147644
Surr: Terphenyl-d14	69.0		% 22-141	1	08/06/09 20:37	S_G	5147644

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/30/2009 12:10	N_M	1.00

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

Client Sample ID: MW-2

Collected: 07/28/2009 10:30

SPL Sample ID: 09071498-04

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	E120.1	Units: umhos/cm	
Specific Conductance	770		10	1	07/29/09 16:30	PAC	5134285
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	854		10	1	07/29/09 16:00	CFS	5135078

Qualifiers:

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

Client Sample ID: MW-2

Collected: 07/28/2009 10:30

SPL Sample ID: 09071498-04

Site: Rio Arriba County

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	08/04/09 15:47	JC	5144283
1,1,1-Trichloroethane	ND		5	1	08/04/09 15:47	JC	5144283
1,1,2,2-Tetrachloroethane	ND		5	1	08/04/09 15:47	JC	5144283
1,1,2-Trichloroethane	ND		5	1	08/04/09 15:47	JC	5144283
1,1-Dichloroethane	ND		5	1	08/04/09 15:47	JC	5144283
1,1-Dichloroethene	ND		5	1	08/04/09 15:47	JC	5144283
1,1-Dichloropropene	ND		5	1	08/04/09 15:47	JC	5144283
1,2,3-Trichlorobenzene	ND		5	1	08/04/09 15:47	JC	5144283
1,2,3-Trichloropropane	ND		5	1	08/04/09 15:47	JC	5144283
1,2,4-Trichlorobenzene	ND		5	1	08/04/09 15:47	JC	5144283
1,2,4-Trimethylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
1,2-Dibromo-3-chloropropane	ND		5	1	08/04/09 15:47	JC	5144283
1,2-Dibromoethane	ND		5	1	08/04/09 15:47	JC	5144283
1,2-Dichlorobenzene	ND		5	1	08/04/09 15:47	JC	5144283
1,2-Dichloroethane	ND		5	1	08/04/09 15:47	JC	5144283
1,2-Dichloropropane	ND		5	1	08/04/09 15:47	JC	5144283
1,3,5-Trimethylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
1,3-Dichlorobenzene	ND		5	1	08/04/09 15:47	JC	5144283
1,3-Dichloropropane	ND		5	1	08/04/09 15:47	JC	5144283
1,4-Dichlorobenzene	ND		5	1	08/04/09 15:47	JC	5144283
2,2-Dichloropropane	ND		5	1	08/04/09 15:47	JC	5144283
2-Butanone	ND		20	1	08/04/09 15:47	JC	5144283
2-Chloroethyl vinyl ether	ND J		10	1	08/04/09 15:47	JC	5144283
2-Chlorotoluene	ND		5	1	08/04/09 15:47	JC	5144283
2-Hexanone	ND		10	1	08/04/09 15:47	JC	5144283
4-Chlorotoluene	ND		5	1	08/04/09 15:47	JC	5144283
4-Isopropyltoluene	ND		5	1	08/04/09 15:47	JC	5144283
4-Methyl-2-pentanone	ND		10	1	08/04/09 15:47	JC	5144283
Acetone	ND		20	1	08/04/09 15:47	JC	5144283
Acrylonitrile	ND		10	1	08/04/09 15:47	JC	5144283
Benzene	ND		5	1	08/04/09 15:47	JC	5144283
Bromobenzene	ND		5	1	08/04/09 15:47	JC	5144283
Bromochloromethane	ND		5	1	08/04/09 15:47	JC	5144283
Bromodichloromethane	ND		5	1	08/04/09 15:47	JC	5144283
Bromoform	ND		5	1	08/04/09 15:47	JC	5144283
Bromomethane	ND		10	1	08/04/09 15:47	JC	5144283
Carbon disulfide	ND		5	1	08/04/09 15:47	JC	5144283
Carbon tetrachloride	ND		5	1	08/04/09 15:47	JC	5144283
Chlorobenzene	ND		5	1	08/04/09 15:47	JC	5144283

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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-2

Collected: 07/28/2009 10:30

SPL Sample ID: 09071498-04

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	08/04/09 15:47	JC	5144283
Chloroform	ND		5	1	08/04/09 15:47	JC	5144283
Chloromethane	ND		10	1	08/04/09 15:47	JC	5144283
Dibromochloromethane	ND		5	1	08/04/09 15:47	JC	5144283
Dibromomethane	ND		5	1	08/04/09 15:47	JC	5144283
Dichlorodifluoromethane	ND		10	1	08/04/09 15:47	JC	5144283
Ethylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
Hexachlorobutadiene	ND		5	1	08/04/09 15:47	JC	5144283
Isopropylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
Methyl tert-butyl ether	ND		5	1	08/04/09 15:47	JC	5144283
Methylene chloride	ND		5	1	08/04/09 15:47	JC	5144283
Naphthalene	ND		5	1	08/04/09 15:47	JC	5144283
n-Butylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
n-Propylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
sec-Butylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
Styrene	ND		5	1	08/04/09 15:47	JC	5144283
tert-Butylbenzene	ND		5	1	08/04/09 15:47	JC	5144283
Tetrachloroethene	ND		5	1	08/04/09 15:47	JC	5144283
Toluene	ND		5	1	08/04/09 15:47	JC	5144283
Trichloroethene	ND		5	1	08/04/09 15:47	JC	5144283
Trichlorofluoromethane	ND		5	1	08/04/09 15:47	JC	5144283
Vinyl acetate	ND		10	1	08/04/09 15:47	JC	5144283
Vinyl chloride	ND		2	1	08/04/09 15:47	JC	5144283
cis-1,2-Dichloroethene	ND		5	1	08/04/09 15:47	JC	5144283
cis-1,3-Dichloropropene	ND		5	1	08/04/09 15:47	JC	5144283
m,p-Xylene	ND		5	1	08/04/09 15:47	JC	5144283
o-Xylene	ND		5	1	08/04/09 15:47	JC	5144283
trans-1,2-Dichloroethene	ND		5	1	08/04/09 15:47	JC	5144283
trans-1,3-Dichloropropene	ND		5	1	08/04/09 15:47	JC	5144283
1,2-Dichloroethene (total)	ND		5	1	08/04/09 15:47	JC	5144283
Xylenes, Total	ND		5	1	08/04/09 15:47	JC	5144283
Surr: 1,2-Dichloroethane-d4	103		% 78-116	1	08/04/09 15:47	JC	5144283
Surr: 4-Bromofluorobenzene	91.3		% 74-125	1	08/04/09 15:47	JC	5144283
Surr: Toluene-d8	107		% 82-118	1	08/04/09 15:47	JC	5144283

Qualifiers:

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

Client Sample ID: Duplicate

Collected: 07/28/2009 10:30

SPL Sample ID: 09071498-05

Site: Rio Arriba County

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	08/04/09 17:09	JC	5144289
1,1,1-Trichloroethane	ND		5	1	08/04/09 17:09	JC	5144289
1,1,2,2-Tetrachloroethane	ND		5	1	08/04/09 17:09	JC	5144289
1,1,2-Trichloroethane	ND		5	1	08/04/09 17:09	JC	5144289
1,1-Dichloroethane	ND		5	1	08/04/09 17:09	JC	5144289
1,1-Dichloroethene	ND		5	1	08/04/09 17:09	JC	5144289
1,1-Dichloropropene	ND		5	1	08/04/09 17:09	JC	5144289
1,2,3-Trichlorobenzene	ND		5	1	08/04/09 17:09	JC	5144289
1,2,3-Trichloropropane	ND		5	1	08/04/09 17:09	JC	5144289
1,2,4-Trichlorobenzene	ND		5	1	08/04/09 17:09	JC	5144289
1,2,4-Trimethylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
1,2-Dibromo-3-chloropropane	ND		5	1	08/04/09 17:09	JC	5144289
1,2-Dibromoethane	ND		5	1	08/04/09 17:09	JC	5144289
1,2-Dichlorobenzene	ND		5	1	08/04/09 17:09	JC	5144289
1,2-Dichloroethane	ND		5	1	08/04/09 17:09	JC	5144289
1,2-Dichloropropane	ND		5	1	08/04/09 17:09	JC	5144289
1,3,5-Trimethylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
1,3-Dichlorobenzene	ND		5	1	08/04/09 17:09	JC	5144289
1,3-Dichloropropane	ND		5	1	08/04/09 17:09	JC	5144289
1,4-Dichlorobenzene	ND		5	1	08/04/09 17:09	JC	5144289
2,2-Dichloropropane	ND		5	1	08/04/09 17:09	JC	5144289
2-Butanone	ND		20	1	08/04/09 17:09	JC	5144289
2-Chloroethyl vinyl ether	ND J		10	1	08/04/09 17:09	JC	5144289
2-Chlorotoluene	ND		5	1	08/04/09 17:09	JC	5144289
2-Hexanone	ND		10	1	08/04/09 17:09	JC	5144289
4-Chlorotoluene	ND		5	1	08/04/09 17:09	JC	5144289
4-Isopropyltoluene	ND		5	1	08/04/09 17:09	JC	5144289
4-Methyl-2-pentanone	ND		10	1	08/04/09 17:09	JC	5144289
Acetone	ND		20	1	08/04/09 17:09	JC	5144289
Acrylonitrile	ND		10	1	08/04/09 17:09	JC	5144289
Benzene	ND		5	1	08/04/09 17:09	JC	5144289
Bromobenzene	ND		5	1	08/04/09 17:09	JC	5144289
Bromochloromethane	ND		5	1	08/04/09 17:09	JC	5144289
Bromodichloromethane	ND		5	1	08/04/09 17:09	JC	5144289
Bromoform	ND		5	1	08/04/09 17:09	JC	5144289
Bromomethane	ND		10	1	08/04/09 17:09	JC	5144289
Carbon disulfide	ND		5	1	08/04/09 17:09	JC	5144289
Carbon tetrachloride	ND		5	1	08/04/09 17:09	JC	5144289
Chlorobenzene	ND		5	1	08/04/09 17:09	JC	5144289

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: Duplicate

Collected: 07/28/2009 10:30

SPL Sample ID: 09071498-05

Site: Rio Arriba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	08/04/09 17:09	JC	5144289
Chloroform	ND		5	1	08/04/09 17:09	JC	5144289
Chloromethane	ND		10	1	08/04/09 17:09	JC	5144289
Dibromochloromethane	ND		5	1	08/04/09 17:09	JC	5144289
Dibromomethane	ND		5	1	08/04/09 17:09	JC	5144289
Dichlorodifluoromethane	ND		10	1	08/04/09 17:09	JC	5144289
Ethylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
Hexachlorobutadiene	ND		5	1	08/04/09 17:09	JC	5144289
Isopropylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
Methyl tert-butyl ether	ND		5	1	08/04/09 17:09	JC	5144289
Methylene chloride	ND		5	1	08/04/09 17:09	JC	5144289
Naphthalene	ND		5	1	08/04/09 17:09	JC	5144289
n-Butylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
n-Propylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
sec-Butylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
Styrene	ND		5	1	08/04/09 17:09	JC	5144289
tert-Butylbenzene	ND		5	1	08/04/09 17:09	JC	5144289
Tetrachloroethene	ND		5	1	08/04/09 17:09	JC	5144289
Toluene	ND		5	1	08/04/09 17:09	JC	5144289
Trichloroethene	ND		5	1	08/04/09 17:09	JC	5144289
Trichlorofluoromethane	ND		5	1	08/04/09 17:09	JC	5144289
Vinyl acetate	ND		10	1	08/04/09 17:09	JC	5144289
Vinyl chloride	ND		2	1	08/04/09 17:09	JC	5144289
cis-1,2-Dichloroethene	ND		5	1	08/04/09 17:09	JC	5144289
cis-1,3-Dichloropropene	ND		5	1	08/04/09 17:09	JC	5144289
m,p-Xylene	ND		5	1	08/04/09 17:09	JC	5144289
o-Xylene	ND		5	1	08/04/09 17:09	JC	5144289
trans-1,2-Dichloroethene	ND		5	1	08/04/09 17:09	JC	5144289
trans-1,3-Dichloropropene	ND		5	1	08/04/09 17:09	JC	5144289
1,2-Dichloroethene (total)	ND		5	1	08/04/09 17:09	JC	5144289
Xylenes, Total	ND		5	1	08/04/09 17:09	JC	5144289
Surr: 1,2-Dichloroethane-d4	103		% 78-116	1	08/04/09 17:09	JC	5144289
Surr: 4-Bromofluorobenzene	91.8		% 74-125	1	08/04/09 17:09	JC	5144289
Surr: Toluene-d8	106		% 82-118	1	08/04/09 17:09	JC	5144289

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: Trip Blank

Collected: 07/28/2009 11:00

SPL Sample ID: 09071498-06

Site: Rio Arriba County

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	08/04/09 13:59	JC	5144279
1,1,1-Trichloroethane	ND		5	1	08/04/09 13:59	JC	5144279
1,1,2,2-Tetrachloroethane	ND		5	1	08/04/09 13:59	JC	5144279
1,1,2-Trichloroethane	ND		5	1	08/04/09 13:59	JC	5144279
1,1-Dichloroethane	ND		5	1	08/04/09 13:59	JC	5144279
1,1-Dichloroethene	ND		5	1	08/04/09 13:59	JC	5144279
1,1-Dichloropropene	ND		5	1	08/04/09 13:59	JC	5144279
1,2,3-Trichlorobenzene	ND		5	1	08/04/09 13:59	JC	5144279
1,2,3-Trichloropropane	ND		5	1	08/04/09 13:59	JC	5144279
1,2,4-Trichlorobenzene	ND		5	1	08/04/09 13:59	JC	5144279
1,2,4-Trimethylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
1,2-Dibromo-3-chloropropane	ND		5	1	08/04/09 13:59	JC	5144279
1,2-Dibromoethane	ND		5	1	08/04/09 13:59	JC	5144279
1,2-Dichlorobenzene	ND		5	1	08/04/09 13:59	JC	5144279
1,2-Dichloroethane	ND		5	1	08/04/09 13:59	JC	5144279
1,2-Dichloropropane	ND		5	1	08/04/09 13:59	JC	5144279
1,3,5-Trimethylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
1,3-Dichlorobenzene	ND		5	1	08/04/09 13:59	JC	5144279
1,3-Dichloropropane	ND		5	1	08/04/09 13:59	JC	5144279
1,4-Dichlorobenzene	ND		5	1	08/04/09 13:59	JC	5144279
2,2-Dichloropropane	ND		5	1	08/04/09 13:59	JC	5144279
2-Butanone	ND		20	1	08/04/09 13:59	JC	5144279
2-Chloroethyl vinyl ether	ND J		10	1	08/04/09 13:59	JC	5144279
2-Chlorotoluene	ND		5	1	08/04/09 13:59	JC	5144279
2-Hexanone	ND		10	1	08/04/09 13:59	JC	5144279
4-Chlorotoluene	ND		5	1	08/04/09 13:59	JC	5144279
4-Isopropyltoluene	ND		5	1	08/04/09 13:59	JC	5144279
4-Methyl-2-pentanone	ND		10	1	08/04/09 13:59	JC	5144279
Acetone	ND		20	1	08/04/09 13:59	JC	5144279
Acrylonitrile	ND		10	1	08/04/09 13:59	JC	5144279
Benzene	ND		5	1	08/04/09 13:59	JC	5144279
Bromobenzene	ND		5	1	08/04/09 13:59	JC	5144279
Bromochloromethane	ND		5	1	08/04/09 13:59	JC	5144279
Bromodichloromethane	ND		5	1	08/04/09 13:59	JC	5144279
Bromoform	ND		5	1	08/04/09 13:59	JC	5144279
Bromomethane	ND		10	1	08/04/09 13:59	JC	5144279
Carbon disulfide	ND		5	1	08/04/09 13:59	JC	5144279
Carbon tetrachloride	ND		5	1	08/04/09 13:59	JC	5144279
Chlorobenzene	ND		5	1	08/04/09 13:59	JC	5144279

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: Trip Blank

Collected: 07/28/2009 11:00

SPL Sample ID: 09071498-06

Site: Rio Ariba County

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	08/04/09 13:59	JC	5144279
Chloroform	ND		5	1	08/04/09 13:59	JC	5144279
Chloromethane	ND		10	1	08/04/09 13:59	JC	5144279
Dibromochloromethane	ND		5	1	08/04/09 13:59	JC	5144279
Dibromomethane	ND		5	1	08/04/09 13:59	JC	5144279
Dichlorodifluoromethane	ND		10	1	08/04/09 13:59	JC	5144279
Ethylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
Hexachlorobutadiene	ND		5	1	08/04/09 13:59	JC	5144279
Isopropylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
Methyl tert-butyl ether	ND		5	1	08/04/09 13:59	JC	5144279
Methylene chloride	ND		5	1	08/04/09 13:59	JC	5144279
Naphthalene	ND		5	1	08/04/09 13:59	JC	5144279
n-Butylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
n-Propylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
sec-Butylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
Styrene	ND		5	1	08/04/09 13:59	JC	5144279
tert-Butylbenzene	ND		5	1	08/04/09 13:59	JC	5144279
Tetrachloroethene	ND		5	1	08/04/09 13:59	JC	5144279
Toluene	ND		5	1	08/04/09 13:59	JC	5144279
Trichloroethene	ND		5	1	08/04/09 13:59	JC	5144279
Trichlorofluoromethane	ND		5	1	08/04/09 13:59	JC	5144279
Vinyl acetate	ND		10	1	08/04/09 13:59	JC	5144279
Vinyl chloride	ND		2	1	08/04/09 13:59	JC	5144279
cis-1,2-Dichloroethene	ND		5	1	08/04/09 13:59	JC	5144279
cis-1,3-Dichloropropene	ND		5	1	08/04/09 13:59	JC	5144279
m,p-Xylene	ND		5	1	08/04/09 13:59	JC	5144279
o-Xylene	ND		5	1	08/04/09 13:59	JC	5144279
trans-1,2-Dichloroethene	ND		5	1	08/04/09 13:59	JC	5144279
trans-1,3-Dichloropropene	ND		5	1	08/04/09 13:59	JC	5144279
1,2-Dichloroethene (total)	ND		5	1	08/04/09 13:59	JC	5144279
Xylenes, Total	ND		5	1	08/04/09 13:59	JC	5144279
Surr: 1,2-Dichloroethane-d4	105		% 78-116	1	08/04/09 13:59	JC	5144279
Surr: 4-Bromofluorobenzene	91.1		% 74-125	1	08/04/09 13:59	JC	5144279
Surr: Toluene-d8	108		% 82-118	1	08/04/09 13:59	JC	5144279

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

San Juan 27-5 #34A

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 09071498
Lab Batch ID: 92450

Method Blank

RunID: HP_V_090731B-5138953 Units: mg/L
Analysis Date: 07/31/2009 1:20 Analyst: NW
Preparation Date: 07/30/2009 8:31 Prep By: N_M Method SW3510C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01D	MW-1
09071498-02D	MW-3
09071498-03D	MW-4
09071498-04D	MW-2

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	0.10
Surr: n-Pentacosane	67.4	20-150

Laboratory Control Sample (LCS)

RunID: HP_V_090731B-5138954 Units: mg/L
Analysis Date: 07/31/2009 1:41 Analyst: NW
Preparation Date: 07/30/2009 8:31 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	1.00	0.628	62.8	21	130
Surr: n-Pentacosane	0.0500	0.0328	65.6	20	150

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

Sample Spiked: 09071508-04
RunID: HP_V_090731B-5139319 Units: mg/L
Analysis Date: 08/03/2009 11:16 Analyst: NW
Preparation Date: 07/30/2009 8:31 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	1.76	1	2.13	36.3	1	2.44	67.1	13.5	39	21	130
Surr: n-Pentacosane	ND	0.05	0.0329	65.8	0.05	0.0347	69.4	5.33	30	20	150

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Gasoline Range Organics
Method: SW8015B

WorkOrder: 09071498
Lab Batch ID: R279684

Method Blank

RunID: HP_P_090730B-5137565 Units: mg/L
Analysis Date: 07/30/2009 16:00 Analyst: CLJ

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-02C	MW-3
09071498-03C	MW-4
09071498-04C	MW-2

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	94.9	60-155
Surr: 4-Bromofluorobenzene	108.2	50-158

Laboratory Control Sample (LCS)

RunID: HP_P_090730B-5137516 Units: mg/L
Analysis Date: 07/30/2009 19:44 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	2.00	2.11	105	42	136
Surr: 1,4-Difluorobenzene	0.100	0.102	102	60	155
Surr: 4-Bromofluorobenzene	0.100	0.113	113	50	158

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

Sample Spiked: 09071281-04
RunID: HP_P_090730B-5137535 Units: mg/L
Analysis Date: 07/31/2009 10:38 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	ND	2	2.14	107	2	2.21	110	3.07	36	22	174
Surr: 1,4-Difluorobenzene	ND	0.1	0.101	101	0.1	0.101	101	0.495	30	60	155
Surr: 4-Bromofluorobenzene	ND	0.1	0.113	113	0.1	0.113	113	0.354	30	50	158

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Gasoline Range Organics
Method: SW8015B

WorkOrder: 09071498
Lab Batch ID: R279749

Method Blank

Samples in Analytical Batch:

RunID: HP_P_090731A-5138767 Units: mg/L
Analysis Date: 07/31/2009 12:33 Analyst: FAK

Lab Sample ID Client Sample ID
09071498-01C MW-1

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	92.4	60-155
Surr: 4-Bromofluorobenzene	103.2	50-158

Laboratory Control Sample (LCS)

RunID: HP_P_090731A-5138769 Units: mg/L
Analysis Date: 07/31/2009 18:21 Analyst: FAK

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.954	95.4	42	136
Surr: 1,4-Difluorobenzene	0.100	0.0936	93.6	60	155
Surr: 4-Bromofluorobenzene	0.100	0.107	107	50	158

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

Sample Spiked: 09071513-01
RunID: HP_P_090731A-5138773 Units: mg/L
Analysis Date: 07/31/2009 22:19 Analyst: FAK

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	1	1.06	103	1	0.974	95.4	7.94	36	22	174
Surr: 1,4-Difluorobenzene	ND	0.1	0.0938	93.8	0.1	0.0964	96.4	2.73	30	60	155
Surr: 4-Bromofluorobenzene	ND	0.1	0.107	107	0.1	0.107	107	0.373	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.
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09071498
Lab Batch ID: 92461

Method Blank

RunID: J_090804B-5142194 Units: ug/L
Analysis Date: 08/04/2009 12:39 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01B	MW-1
09071498-02B	MW-3
09071498-03B	MW-4
09071498-04B	MW-2

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
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.

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Quality Control Report

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

Conoco Phillips

San Juan 27-5 #34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09071498
Lab Batch ID: 92461

Method Blank

RunID: J_090804B-5142194 Units: ug/L
Analysis Date: 08/04/2009 12:39 Analyst: S_G
Preparation Date: 07/30/2009 12:10 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	83.5	10-123
Surr: 2-Fluorobiphenyl	92.0	23-116
Surr: 2-Fluorophenol	68.3	16-110
Surr: Nitrobenzene-d5	86.4	21-114
Surr: Phenol-d5	52.3	10-110
Surr: Terphenyl-d14	77.2	22-141

Laboratory Control Sample (LCS)

RunID: J_090804B-5142193 Units: ug/L
Analysis Date: 08/04/2009 12:01 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	25.0	21.4	85.6	21	120
1,2-Dichlorobenzene	25.0	21.8	87.2	20	150
1,2-Diphenylhydrazine	25.0	27.6	110	10	251

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09071498
Lab Batch ID: 92461

Laboratory Control Sample (LCS)

RunID: J_090804B-5142193 Units: ug/L
Analysis Date: 08/04/2009 12:01 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,3-Dichlorobenzene	25.0	21.2	84.8	20	150
1,4-Dichlorobenzene	25.0	21.0	84.0	20	150
2,4,5-Trichlorophenol	25.0	23.6	94.4	30	150
2,4,6-Trichlorophenol	25.0	23.5	94.0	30	150
2,4-Dichlorophenol	25.0	22.1	88.4	30	150
2,4-Dimethylphenol	25.0	22.8	91.2	32	140
2,4-Dinitrophenol	25.0	16.1	64.4	10	160
2,4-Dinitrotoluene	25.0	22.3	89.2	30	150
2,6-Dinitrotoluene	25.0	21.7	86.8	30	150
2-Chloronaphthalene	25.0	22.4	89.6	30	150
2-Chlorophenol	25.0	21.4	85.6	23	134
2-Methylnaphthalene	25.0	21.1	84.4	20	170
2-Nitroaniline	25.0	23.2	92.8	20	160
2-Nitrophenol	25.0	19.7	78.8	29	182
3,3'-Dichlorobenzidine	25.0	22.3	89.2	30	200
3-Nitroaniline	25.0	21.2	84.8	20	160
4,6-Dinitro-2-methylphenol	25.0	18.7	74.8	10	160
4-Bromophenyl phenyl ether	25.0	24.9	99.6	30	150
4-Chloro-3-methylphenol	25.0	21.8	87.2	25	160
4-Chloroaniline	25.0	22.2	88.8	20	160
4-Chlorophenyl phenyl ether	25.0	22.0	88.0	25	158
4-Nitroaniline	25.0	22.0	88.0	20	160
4-Nitrophenol	25.0	23.6	94.4	10	132
Acenaphthene	25.0	23.0	92.0	30	150
Acenaphthylene	25.0	23.8	95.2	33	250
Aniline	50.0	43.6	87.2	10	135
Anthracene	25.0	26.4	106	27	133
Benz(a)anthracene	25.0	24.3	97.2	33	143
Benzo(a)pyrene	25.0	19.7	78.8	17	163
Benzo(b)fluoranthene	25.0	20.0	80.0	24	159
Benzo(g,h,i)perylene	25.0	22.3	89.2	30	160
Benzo(k)fluoranthene	25.0	21.2	84.8	11	162
Benzoic acid	25.0	19.9	79.6	10	400
Benzyl alcohol	25.0	23.9	95.6	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.
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
San Juan 27-5 #34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09071498
Lab Batch ID: 92461

Laboratory Control Sample (LCS)

RunID: J_090804B-5142193 Units: ug/L
Analysis Date: 08/04/2009 12:01 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bis(2-chloroethoxy)methane	25.0	21.2	84.8	33	184
Bis(2-chloroethyl)ether	25.0	22.0	88.0	12	158
Bis(2-chloroisopropyl)ether	25.0	24.5	98.0	20	160
Bis(2-ethylhexyl)phthalate	25.0	24.9	99.6	10	158
Butyl benzyl phthalate	25.0	24.6	98.4	30	160
Carbazole	25.0	27.2	109	30	150
Chrysene	25.0	23.6	94.4	17	168
Dibenz(a,h)anthracene	25.0	22.2	88.8	30	160
Dibenzofuran	25.0	23.3	93.2	30	150
Diethyl phthalate	25.0	23.2	92.8	30	160
Dimethyl phthalate	25.0	23.3	93.2	30	160
Di-n-butyl phthalate	25.0	27.4	110	30	160
Di-n-octyl phthalate	25.0	22.7	90.8	20	150
Fluoranthene	25.0	27.7	111	26	137
Fluorene	25.0	22.8	91.2	30	150
Hexachlorobenzene	25.0	25.5	102	20	150
Hexachlorobutadiene	25.0	20.2	80.8	20	140
Hexachlorocyclopentadiene	25.0	17.0	68.0	10	150
Hexachloroethane	25.0	20.6	82.4	14	120
Indeno(1,2,3-cd)pyrene	25.0	26.7	107	30	160
Isophorone	25.0	25.1	100	21	196
Naphthalene	25.0	22.2	88.8	21	133
Nitrobenzene	25.0	21.5	86.0	20	160
N-Nitrosodi-n-propylamine	25.0	23.4	93.6	30	160
N-Nitrosodiphenylamine	50.0	62.2	124	30	150
Pentachlorophenol	25.0	26.4	106	14	176
Phenanthrene	25.0	26.2	105	10	140
Phenol	25.0	25.3	101	40	132
Pyrene	25.0	23.2	92.8	30	150
Pyridine	50.0	41.5	83.0	10	150
2-Methylphenol	25.0	23.0	92.0	30	160
3 & 4-Methylphenol	25.0	22.4	89.6	10	160
Surr: 2,4,6-Tribromophenol	75.0	65.6	87.5	10	123
Surr: 2-Fluorobiphenyl	50.0	41.8	83.6	23	116

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.

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Quality Control Report

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

Conoco Phillips

San Juan 27-5 #34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09071498
Lab Batch ID: 92461

Laboratory Control Sample (LCS)

RunID: J_090804B-5142193 Units: ug/L
Analysis Date: 08/04/2009 12:01 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Surr: 2-Fluorophenol	75.0	47	62.7	16	110
Surr: Nitrobenzene-d5	50.0	40.2	80.4	21	114
Surr: Phenol-d5	75.0	36.2	48.3	10	110
Surr: Terphenyl-d14	50.0	39.4	78.8	22	141

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

Sample Spiked: 09071508-04
RunID: J_090804B-5142195 Units: ug/L
Analysis Date: 08/04/2009 13:15 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,2,4-Trichlorobenzene	ND	25	18.4	73.6	25	18.6	74.4	1.08	39	10	142
1,2-Dichlorobenzene	ND	25	18.2	72.8	25	18.5	74.0	1.63	50	20	150
1,2-Diphenylhydrazine	ND	25	24.3	97.2	25	24.4	97.6	0.411	50	10	251
1,3-Dichlorobenzene	ND	25	17.7	70.8	25	17.7	70.8	0	50	20	150
1,4-Dichlorobenzene	ND	25	17.1	68.4	25	17.6	70.4	2.88	45	20	150
2,4,5-Trichlorophenol	ND	25	20.6	82.4	25	21.1	84.4	2.40	50	30	150
2,4,6-Trichlorophenol	ND	25	20.4	81.6	25	21.0	84.0	2.90	50	30	150
2,4-Dichlorophenol	ND	25	19.3	77.2	25	19.7	78.8	2.05	50	30	150
2,4-Dimethylphenol	ND	25	19.4	77.6	25	19.6	78.4	1.03	50	32	140
2,4-Dinitrophenol	ND	25	14.1	56.4	25	16.5	66.0	15.7	50	10	160
2,4-Dinitrotoluene	ND	25	18.8	75.2	25	19.3	77.2	2.62	50	30	150
2,6-Dinitrotoluene	ND	25	18.9	75.6	25	19.3	77.2	2.09	50	30	150
2-Chloronaphthalene	ND	25	19.8	79.2	25	19.9	79.6	0.504	50	30	150
2-Chlorophenol	ND	25	17.7	70.8	25	18.0	72.0	1.68	40	23	134
2-Methylnaphthalene	ND	25	19.1	76.4	25	19.1	76.4	0	50	20	170
2-Nitroaniline	ND	25	19.2	76.8	25	21.0	84.0	8.96	50	20	160
2-Nitrophenol	ND	25	16.6	66.4	25	17.9	71.6	7.54	50	29	182
3,3'-Dichlorobenzidine	ND	25	4.96	19.8 *	25	4.63	18.5 *	6.88	50	30	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

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Quality Control Report

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

Conoco Phillips San Juan 27-5 #34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09071498
Lab Batch ID: 92461

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

Sample Spiked: 09071508-04
RunID: J_090804B-5142195 Units: ug/L
Analysis Date: 08/04/2009 13:15 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
3-Nitroaniline	ND	25	16.9	67.6	25	17.2	68.8	1.76	50	20	160
4,6-Dinitro-2-methylphenol	ND	25	16.2	64.8	25	18.1	72.4	11.1	50	10	160
4-Bromophenyl phenyl ether	ND	25	21.8	87.2	25	21.2	84.8	2.79	50	30	150
4-Chloro-3-methylphenol	ND	25	19.4	77.6	25	20.2	80.8	4.04	42	25	160
4-Chloroaniline	ND	25	15.4	61.6	25	16.1	64.4	4.44	50	20	160
4-Chlorophenyl phenyl ether	ND	25	19.6	78.4	25	19.3	77.2	1.54	50	25	158
4-Nitroaniline	ND	25	17.6	70.4	25	17.9	71.6	1.69	50	20	160
4-Nitrophenol	ND	25	11.9	47.6	25	13.2	52.8	10.4	50	10	132
Acenaphthene	ND	25	20.6	82.4	25	20.7	82.8	0.484	31	30	150
Acenaphthylene	ND	25	21.5	86.0	25	21.5	86.0	0	50	33	250
Aniline	ND	50	25.8	51.6	50	26.8	53.6	3.80	50	10	135
Anthracene	ND	25	22.9	91.6	25	23.1	92.4	0.870	50	27	133
Benz(a)anthracene	ND	25	19.0	76.0	25	18.7	74.8	1.59	50	33	143
Benzo(a)pyrene	ND	25	14.2	56.8	25	14.4	57.6	1.40	50	17	163
Benzo(b)fluoranthene	ND	25	14.8	59.2	25	14.7	58.8	0.678	50	24	159
Benzo(g,h,i)perylene	ND	25	16.4	65.6	25	16.5	66.0	0.608	50	30	160
Benzo(k)fluoranthene	ND	25	14.9	59.6	25	15.0	60.0	0.669	50	11	162
Benzoic acid	ND	25	24.9	99.6	25	27.1	108	8.46	50	10	400
Benzyl alcohol	ND	25	17.3	69.2	25	18.5	74.0	6.70	50	30	160
Bis(2-chloroethoxy)methane	ND	25	18.6	74.4	25	18.4	73.6	1.08	50	33	184
Bis(2-chloroethyl)ether	ND	25	18.5	74.0	25	18.9	75.6	2.14	50	12	158
Bis(2-chloroisopropyl)ether	ND	25	20.7	82.8	25	21.0	84.0	1.44	50	20	160
Bis(2-ethylhexyl)phthalate	ND	25	19.8	79.2	25	19.5	78.0	1.53	50	10	158
Butyl benzyl phthalate	ND	25	20.3	81.2	25	20.0	80.0	1.49	50	30	160
Carbazole	ND	25	22.8	91.2	25	22.8	91.2	0	50	30	150
Chrysene	ND	25	18.7	74.8	25	18.6	74.4	0.536	50	17	168
Dibenz(a,h)anthracene	ND	25	15.5	62.0	25	16.1	64.4	3.80	50	30	160
Dibenzofuran	ND	25	21.0	84.0	25	20.8	83.2	0.957	50	30	150
Diethyl phthalate	ND	25	20.4	81.6	25	20.2	80.8	0.985	50	30	160
Dimethyl phthalate	ND	25	20.6	82.4	25	20.5	82.0	0.487	50	30	160
Di-n-butyl phthalate	ND	25	23.0	92.0	25	22.8	91.2	0.873	50	30	160
Di-n-octyl phthalate	ND	25	18.4	73.6	25	18.4	73.6	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

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Quality Control Report

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

Conoco Phillips San Juan 27-5 #34A

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09071498
Lab Batch ID: 92461

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

Sample Spiked: 09071508-04
RunID: J_090804B-5142195 Units: ug/L
Analysis Date: 08/04/2009 13:15 Analyst: S_G
Preparation Date: 07/30/2009 12:10 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Fluoranthene	ND	25	22.7	90.8	25	22.9	91.6	0.877	50	26	137
Fluorene	ND	25	20.6	82.4	25	20.4	81.6	0.976	50	30	150
Hexachlorobenzene	ND	25	21.0	84.0	25	20.8	83.2	0.957	50	20	150
Hexachlorobutadiene	ND	25	17.5	70.0	25	16.8	67.2	4.08	50	20	140
Hexachlorocyclopentadiene	ND	25	14.9	59.6	25	14.7	58.8	1.35	50	10	150
Hexachloroethane	ND	25	16.7	66.8	25	17.2	68.8	2.95	50	10	140
Indeno(1,2,3-cd)pyrene	ND	25	21.0	84.0	25	20.9	83.6	0.477	50	30	160
Isophorone	ND	25	22.4	89.6	25	22.7	90.8	1.33	50	21	196
Naphthalene	ND	25	19.6	78.4	25	19.8	79.2	1.02	50	21	133
Nitrobenzene	ND	25	18.9	75.6	25	19.5	78.0	3.13	50	20	160
N-Nitrosodi-n-propylamine	ND	25	20.5	82.0	25	21.2	84.8	3.36	38	30	160
N-Nitrosodiphenylamine	ND	50	54.3	109	50	54.0	108	0.554	50	30	150
Pentachlorophenol	ND	25	26.0	104	25	25.4	102	2.33	50	14	176
Phenanthrene	ND	25	22.8	91.2	25	22.9	91.6	0.438	50	10	140
Phenol	ND	25	12.8	51.2	25	12.9	51.6	0.778	42	40	132
Pyrene	ND	25	20.4	81.6	25	20.1	80.4	1.48	38	30	150
Pyridine	ND	50	19.9	39.8	50	20.0	40.0	0.501	50	10	150
2-Methylphenol	ND	25	17.9	71.6	25	18.5	74.0	3.30	50	30	160
3 & 4-Methylphenol	ND	25	16.5	66.0	25	17.1	68.4	3.57	50	10	160
Surr: 2,4,6-Tribromophenol	ND	75	56.7	75.6	75	57.3	76.4	1.05	30	10	123
Surr: 2-Fluorobiphenyl	ND	50	37.7	75.4	50	37.2	74.4	1.34	30	23	116
Surr: 2-Fluorophenol	ND	75	38.3	51.1	75	39.7	52.9	3.59	30	16	110
Surr: Nitrobenzene-d5	ND	50	35.1	70.2	50	35.9	71.8	2.25	30	21	114
Surr: Phenol-d5	ND	75	29.4	39.2	75	30.2	40.3	2.68	30	10	110
Surr: Terphenyl-d14	ND	50	29.1	58.2	50	28.8	57.6	1.04	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
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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09071498
Lab Batch ID: R280070

Method Blank

RunID: Q_090804A-5144277 Units: ug/L
Analysis Date: 08/04/2009 13:05 Analyst: JC

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01A	MW-1
09071498-02A	MW-3
09071498-03A	MW-4
09071498-04A	MW-2
09071498-05A	Duplicate
09071498-06A	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	10
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09071498
Lab Batch ID: R280070

Method Blank

RunID: Q_090804A-5144277 Units: ug/L
Analysis Date: 08/04/2009 13:05 Analyst: JC

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	103.3	78-116
Surr: 4-Bromofluorobenzene	91.2	74-125
Surr: Toluene-d8	107.3	82-118

Laboratory Control Sample (LCS)

RunID: Q_090804A-5144276 Units: ug/L
Analysis Date: 08/04/2009 12:38 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	19.2	96.2	71	128
1,1,1-Trichloroethane	20.0	18.7	93.6	61	135
1,1,2,2-Tetrachloroethane	20.0	20.7	103	60	133
1,1,2-Trichloroethane	20.0	21.6	108	77	127
1,1-Dichloroethane	20.0	18.9	94.5	68	132

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

San Juan 27-5 #34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09071498
Lab Batch ID: R280070

Laboratory Control Sample (LCS)

RunID: Q_090804A-5144276 Units: ug/L
Analysis Date: 08/04/2009 12:38 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	20.4	102	65	134
1,1-Dichloropropene	20.0	19.9	99.4	68	126
1,2,3-Trichlorobenzene	20.0	18.6	93.2	36	154
1,2,3-Trichloropropane	20.0	19.9	99.7	38	153
1,2,4-Trichlorobenzene	20.0	18.3	91.5	69	144
1,2,4-Trimethylbenzene	20.0	21.4	107	64	128
1,2-Dibromo-3-chloropropane	20.0	20.6	103	44	141
1,2-Dibromoethane	20.0	22.2	111	75	124
1,2-Dichlorobenzene	20.0	20.4	102	68	124
1,2-Dichloroethane	20.0	18.3	91.3	61	138
1,2-Dichloropropane	20.0	18.9	94.7	76	123
1,3,5-Trimethylbenzene	20.0	21.3	106	61	127
1,3-Dichlorobenzene	20.0	20.3	102	68	127
1,3-Dichloropropane	20.0	20.7	103	76	125
1,4-Dichlorobenzene	20.0	19.6	97.8	68	124
2,2-Dichloropropane	20.0	20.0	99.9	42	142
2-Butanone	20.0	30.7	153	22	183
2-Chloroethyl vinyl ether	20.0	28.7	143	10	179
2-Chlorotoluene	20.0	22.1	111	64	132
2-Hexanone	20.0	23.9	120	31	178
4-Chlorotoluene	20.0	21.4	107	61	132
4-Isopropyltoluene	20.0	21.4	107	63	136
4-Methyl-2-pentanone	20.0	19.1	95.6	10	159
Acetone	20.0	17.9	89.7	10	200
Acrylonitrile	20.0	20.5	102	54	155
Benzene	20.0	18.8	94.1	74	123
Bromobenzene	20.0	20.3	102	68	125
Bromochloromethane	20.0	19.9	99.5	71	124
Bromodichloromethane	20.0	19.3	96.3	72	128
Bromoform	20.0	19.6	97.8	60	128
Bromomethane	20.0	17.4	87.0	53	130
Carbon disulfide	20.0	19.0	94.8	41	143
Carbon tetrachloride	20.0	18.3	91.3	59	142
Chlorobenzene	20.0	20.1	101	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.
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MI - Matrix Interference
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Quality Control Report

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

Conoco Phillips

San Juan 27-5 #34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09071498
Lab Batch ID: R280070

Laboratory Control Sample (LCS)

RunID: Q_090804A-5144276 Units: ug/L
Analysis Date: 08/04/2009 12:38 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	17.4	87.0	60	134
Chloroform	20.0	19.6	97.9	71	127
Chloromethane	20.0	17.8	89.0	50	139
Dibromochloromethane	20.0	20.0	100	65	130
Dibromomethane	20.0	19.3	96.7	79	124
Dichlorodifluoromethane	20.0	22.1	110	22	162
Ethylbenzene	20.0	20.0	99.8	72	127
Hexachlorobutadiene	20.0	16.4	82.1	45	152
Isopropylbenzene	20.0	17.3	86.6	58	130
Methyl tert-butyl ether	40.0	39.0	97.5	63	123
Methylene chloride	20.0	19.0	94.9	61	135
Naphthalene	20.0	20.2	101	33	148
n-Butylbenzene	20.0	21.1	105	62	136
n-Propylbenzene	20.0	21.2	106	57	131
sec-Butylbenzene	20.0	22.4	112	63	131
Styrene	20.0	19.9	99.4	69	120
tert-Butylbenzene	20.0	21.4	107	59	131
Tetrachloroethene	20.0	17.2	86.2	45	173
Toluene	20.0	21.3	107	74	126
Trichloroethene	20.0	19.4	96.8	79	131
Trichlorofluoromethane	20.0	22.9	114	49	153
Vinyl acetate	20.0	15.9	79.5	10	167
Vinyl chloride	20.0	17.1	85.6	51	148
cis-1,2-Dichloroethene	20.0	20.9	104	71	128
cis-1,3-Dichloropropene	20.0	20.5	102	67	128
m,p-Xylene	40.0	40.8	102	71	129
o-Xylene	20.0	20.3	102	74	130
trans-1,2-Dichloroethene	20.0	19.4	97.1	66	128
trans-1,3-Dichloropropene	20.0	19.7	98.4	60	128
1,2-Dichloroethene (total)	40.0	40.3	101	66	128
Xylenes, Total	60.0	61.1	102	71	130
Surr: 1,2-Dichloroethane-d4	50.0	49	98.1	78	116
Surr: 4-Bromofluorobenzene	50.0	47.5	95.1	74	125
Surr: Toluene-d8	50.0	53.1	106	82	118

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
San Juan 27-5 #34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09071498
Lab Batch ID: R280070

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

Sample Spiked: 09071498-04
RunID: Q_090804A-5144284 Units: ug/L
Analysis Date: 08/04/2009 16:14 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	19.9	99.4	20	19.7	98.6	0.778	20	68	124
1,1,1-Trichloroethane	ND	20	18.7	93.7	20	19.0	95.1	1.46	20	69	123
1,1,2,2-Tetrachloroethane	ND	20	21.3	106	20	21.5	108	1.25	20	69	130
1,1,2-Trichloroethane	ND	20	21.8	109	20	21.1	106	2.99	20	75	126
1,1-Dichloroethane	ND	20	17.7	88.6	20	17.8	89.1	0.540	20	65	129
1,1-Dichloroethene	ND	20	19.8	98.8	20	19.9	99.6	0.781	22	61	139
1,1-Dichloropropene	ND	20	19.0	95.0	20	19.9	99.3	4.44	20	69	121
1,2,3-Trichlorobenzene	ND	20	19.2	95.9	20	19.2	95.9	0.0104	20	53	127
1,2,3-Trichloropropane	ND	20	21.1	105	20	21.4	107	1.40	20	79	124
1,2,4-Trichlorobenzene	ND	20	18.1	90.6	20	18.3	91.7	1.14	20	58	118
1,2,4-Trimethylbenzene	ND	20	20.6	103	20	20.4	102	0.944	20	43	132
1,2-Dibromo-3-chloropropane	ND	20	21.1	106	20	21.4	107	1.36	20	46	131
1,2-Dibromoethane	ND	20	21.7	109	20	21.5	107	1.22	20	76	122
1,2-Dichlorobenzene	ND	20	20.7	103	20	20.7	104	0.174	20	74	110
1,2-Dichloroethane	ND	20	18.5	92.5	20	19.0	94.9	2.58	20	60	129
1,2-Dichloropropane	ND	20	18.7	93.5	20	19.1	95.4	1.97	20	76	116
1,3,5-Trimethylbenzene	ND	20	20.4	102	20	19.7	98.7	3.50	20	51	121
1,3-Dichlorobenzene	ND	20	20.0	99.9	20	19.7	98.7	1.26	20	71	110
1,3-Dichloropropane	ND	20	20.7	104	20	20.7	104	0.0338	20	80	119
1,4-Dichlorobenzene	ND	20	19.2	95.9	20	19.7	98.7	2.89	20	69	110
2,2-Dichloropropane	ND	20	20.1	101	20	20.3	101	0.693	20	52	122
2-Butanone	ND	20	27.9	140 *	20	29.3	147 *	4.93	20	10	133
2-Chloroethyl vinyl ether	ND	20	0	0 *	20	0	0 *	0	20	10	182
2-Chlorotoluene	ND	20	21.3	107	20	20.8	104	2.48	20	69	112
2-Hexanone	ND	20	18.3	91.6	20	18.7	93.3	1.76	20	10	163
4-Chlorotoluene	ND	20	21.3	106	20	20.0	100	6.15	20	37	110
4-Isopropyltoluene	ND	20	21.5	107	20	20.9	104	2.73	20	65	116
4-Methyl-2-pentanone	ND	20	19.5	97.5	20	20.4	102	4.68	20	10	159
Acetone	ND	20	15.0	74.9	20	15.5	77.7	3.72	20	10	160
Acrylonitrile	ND	20	20.9	104	20	20.0	99.9	4.42	20	45	155

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
San Juan 27-5 #34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09071498
Lab Batch ID: R280070

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

Sample Spiked: 09071498-04
RunID: Q_090804A-5144284 Units: ug/L
Analysis Date: 08/04/2009 16:14 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	18.8	93.9	20	18.7	93.4	0.544	22	70	124
Bromobenzene	ND	20	19.7	98.4	20	19.6	98.0	0.392	20	72	111
Bromochloromethane	ND	20	18.6	93.1	20	19.1	95.3	2.32	20	73	126
Bromodichloromethane	ND	20	19.8	99.0	20	19.7	98.7	0.278	20	68	125
Bromoform	ND	20	21.9	109	20	21.5	108	1.58	20	44	132
Bromomethane	ND	20	17.5	87.4	20	17.3	86.4	1.25	20	50	140
Carbon disulfide	ND	20	17.9	89.3	20	17.8	88.8	0.472	20	46	143
Carbon tetrachloride	ND	20	19.5	97.7	20	19.8	99.1	1.46	20	66	126
Chlorobenzene	ND	20	20.9	105	20	20.7	103	1.23	21	68	123
Chloroethane	ND	20	17.8	88.9	20	17.2	86.0	3.36	20	59	134
Chloroform	ND	20	18.7	93.3	20	19.2	96.0	2.89	20	68	127
Chloromethane	ND	20	19.4	97.2	20	19.7	98.7	1.51	20	51	137
Dibromochloromethane	ND	20	20.7	104	20	20.7	103	0.372	20	58	131
Dibromomethane	ND	20	19.2	96.0	20	19.1	95.7	0.292	20	82	123
Dichlorodifluoromethane	ND	20	22.0	110	20	23.7	119	7.38	20	35	143
Ethylbenzene	ND	20	20.5	103	20	20.8	104	1.37	20	76	122
Hexachlorobutadiene	ND	20	18.3	91.3	20	17.7	88.4	3.21	20	43	137
Isopropylbenzene	ND	20	18.1	90.7	20	18.0	90.3	0.497	20	57	124
Methyl tert-butyl ether	ND	40	36.6	91.6	40	37.8	94.5	3.14	20	10	200
Methylene chloride	ND	20	18.7	93.7	20	18.2	90.8	3.21	20	70	134
Naphthalene	ND	20	20.8	104	20	20.6	103	0.861	20	42	140
n-Butylbenzene	ND	20	21.7	109	20	21.1	105	3.13	20	82	112
n-Propylbenzene	ND	20	20.1	100	20	19.8	99.1	1.40	20	73	108
sec-Butylbenzene	ND	20	22.1	110 *	20	21.0	105	5.00	20	76	110
Styrene	ND	20	20.4	102	20	20.4	102	0.264	20	58	152
tert-Butylbenzene	ND	20	20.7	104	20	19.9	99.6	3.98	20	66	120
Tetrachloroethene	ND	20	17.5	87.7	20	17.6	87.9	0.234	20	71	130
Toluene	ND	20	21.7	109	20	21.4	107	1.44	24	80	117
Trichloroethene	ND	20	20.0	100	20	20.0	100	0.0300	21	82	121
Trichlorofluoromethane	ND	20	16.4	82.2	20	18.7	93.7	13.0	20	74	138
Vinyl acetate	ND	20	15.7	78.7	20	15.7	78.6	0.127	20	66	135
Vinyl chloride	ND	20	18.9	94.3	20	19.7	98.4	4.21	20	45	143

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
San Juan 27-5 #34A

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09071498
Lab Batch ID: R280070

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

Sample Spiked: 09071498-04
RunID: Q_090804A-5144284 Units: ug/L
Analysis Date: 08/04/2009 16:14 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	19.1	95.3	20	19.5	97.5	2.26	20	67	132
cis-1,3-Dichloropropene	ND	20	20.5	102	20	20.8	104	1.53	20	67	116
m,p-Xylene	ND	40	42.6	106	40	41.6	104	2.34	20	69	127
o-Xylene	ND	20	21.5	108	20	21.3	107	0.934	20	84	114
trans-1,2-Dichloroethene	ND	20	18.8	94.0	20	19.1	95.5	1.59	20	68	131
trans-1,3-Dichloropropene	ND	20	20.2	101	20	20.2	101	0.158	20	56	131
1,2-Dichloroethene (total)	ND	40	37.9	94.7	40	38.6	96.5	1.93	20	67	132
Xylenes, Total	ND	60	64.1	107	60	62.9	105	1.86	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	50.7	101	50	51.9	104	2.24	30	78	116
Surr: 4-Bromofluorobenzene	ND	50	49.8	99.6	50	49.1	98.1	1.48	30	74	125
Surr: Toluene-d8	ND	50	53.2	106	50	52.5	105	1.39	30	82	118

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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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 09071498
Lab Batch ID: R279435A

Method Blank

RunID: IC2_090729A-5133737 Units: mg/L
Analysis Date: 07/29/2009 10:39 Analyst: BDG

Analyte	Result	Rep Limit
Bromide	ND	0.50
Chloride	ND	0.50
Fluoride	ND	0.50

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01F	MW-1
09071498-02F	MW-3
09071498-03F	MW-4
09071498-04F	MW-2

Laboratory Control Sample (LCS)

RunID: IC2_090729A-5133738 Units: mg/L
Analysis Date: 07/29/2009 10:56 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bromide	10.00	9.596	95.96	85	115
Chloride	10.00	9.507	95.07	85	115
Fluoride	10.00	9.675	96.75	85	115

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

Sample Spiked: 09071498-02
RunID: IC2_090729A-5134944 Units: mg/L
Analysis Date: 07/29/2009 16:19 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	9.412	94.12	10	9.397	93.97	0.1595	20	80	120
Chloride	4.464	10	14.26	97.92	10	14.28	98.14	0.1542	20	80	120
Fluoride	ND	10	9.982	95.65	10	10.01	95.91	0.2601	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.
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: pH
Method: SM4500-H B

WorkOrder: 09071498
Lab Batch ID: R279457

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01F	MW-1
09071498-02F	MW-3
09071498-03F	MW-4
09071498-04F	MW-2

Laboratory Control Sample (LCS)

RunID: WET_090729M-5134247 Units: pH Units
Analysis Date: 07/29/2009 12:00 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7.000	7.050	100.7	98	102

Sample Duplicate

Original Sample: 09071498-04
RunID: WET_090729M-5134252 Units: pH Units
Analysis Date: 07/29/2009 14:30 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
pH	7.92	7.95	0.378	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

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

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

WorkOrder: 09071498
Lab Batch ID: R279460

Method Blank

RunID: WET_090729P-5134266 Units: mg/L
Analysis Date: 07/29/2009 16:00 Analyst: PAC

Analyte	Result	Rep Limit
Hardness (As CaCO3)	ND	5.0

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01E	MW-1
09071498-02E	MW-3
09071498-03E	MW-4
09071498-04E	MW-2

Laboratory Control Sample (LCS)

RunID: WET_090729P-5134268 Units: mg/L
Analysis Date: 07/29/2009 16:00 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Hardness (As CaCO3)	243.0	240.0	98.77	85	115

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

Sample Spiked: 09071498-04
RunID: WET_090729P-5134273 Units: mg/L
Analysis Date: 07/29/2009 16:00 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)	116.0	100	212.0	96.00	100	212.0	96.00	0	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.
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Specific Conductance @ 25 C
Method: E120.1

WorkOrder: 09071498
Lab Batch ID: R279462

Method Blank

RunID: WET_090729R-5134279 Units: umhos/cm
Analysis Date: 07/29/2009 16:30 Analyst: PAC

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01G	MW-1
09071498-02G	MW-3
09071498-03G	MW-4
09071498-04G	MW-2

Analyte	Result	Rep Limit
Specific Conductance	ND	10

Laboratory Control Sample (LCS)

RunID: WET_090729R-5134281 Units: umhos/cm
Analysis Date: 07/29/2009 16:30 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Specific Conductance	1413	1312	92.85	90	110

Sample Duplicate

Original Sample: 09071498-04
RunID: WET_090729R-5134285 Units: umhos/cm
Analysis Date: 07/29/2009 16:30 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Specific Conductance	770	771	0.130	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.
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Alkalinity (as CaCO₃), Total
Method: E310.1

WorkOrder: 09071498
Lab Batch ID: R279497

Method Blank

RunID: WET_090730B-5134850 Units: mg/L
Analysis Date: 07/30/2009 8:45 Analyst: PAC

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01F	MW-1
09071498-02F	MW-3
09071498-03F	MW-4
09071498-04F	MW-2

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

Laboratory Control Sample (LCS)

RunID: WET_090730B-5134854 Units: mg/L
Analysis Date: 07/30/2009 8:45 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Alkalinity, Total (As CaCO ₃)	38.70	37.00	95.61	90	110

Sample Duplicate

Original Sample: 09071498-04
RunID: WET_090730B-5134862 Units: mg/L
Analysis Date: 07/30/2009 8:45 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Alkalinity, Total (As CaCO ₃)	296	296	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.
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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 09071498
Lab Batch ID: R279504

Method Blank

RunID: IC2_090729B-5134914 Units: mg/L
Analysis Date: 07/29/2009 10:39 Analyst: BDG

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

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01F	MW-1
09071498-02F	MW-3
09071498-03F	MW-4
09071498-04F	MW-2

Laboratory Control Sample (LCS)

RunID: IC2_090729B-5134916 Units: mg/L
Analysis Date: 07/29/2009 10:56 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	10.00	9.204	92.04	90	110
Nitrogen,Nitrite (As N)	10.00	9.694	96.94	90	110

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

Sample Spiked: 09071498-02
RunID: IC2_090729B-5134923 Units: mg/L
Analysis Date: 07/29/2009 16:19 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	8.842	88.42	10	8.835	88.35	0.07920	20	80	120
Nitrogen,Nitrite (As N)	ND	10	9.455	94.55	10	9.488	94.88	0.3484	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

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.

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Quality Control Report

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

Conoco Phillips
San Juan 27-5 #34A

Analysis: Total Dissolved Solids
Method: SM2540 C

WorkOrder: 09071498
Lab Batch ID: R279518A

Method Blank

RunID: WET_090729V-5135068 Units: mg/L
Analysis Date: 07/29/2009 16:00 Analyst: CFS

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-01G	MW-1
09071498-02G	MW-3
09071498-03G	MW-4
09071498-04G	MW-2

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

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

RunID: WET_090729V-5135070 Units: mg/L
Analysis Date: 07/29/2009 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,Filterabl	200.0	201.0	100.5	200.0	199.0	99.50	1.0	10	95	107

Sample Duplicate

Original Sample: 09071498-01
RunID: WET_090729V-5135074 Units: mg/L
Analysis Date: 07/29/2009 16:00 Analyst: CFS

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue,Filterabl	750	752	0.266	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.

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Quality Control Report

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

Conoco Phillips

San Juan 27-5 #34A

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 09071498
Lab Batch ID: R279831

Method Blank

RunID: IC1_090803A-5139841 Units: mg/L
Analysis Date: 08/03/2009 13:24 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID Client Sample ID
09071498-01F MW-1

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

Laboratory Control Sample (LCS)

RunID: IC1_090803A-5139842 Units: mg/L
Analysis Date: 08/03/2009 13:42 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Ortho-phosphate (As P)	10.00	9.680	96.80	85	115

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

Sample Spiked: 09071599-01
RunID: IC1_090803A-5141470 Units: mg/L
Analysis Date: 08/03/2009 17:09 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
Ortho-phosphate (As P)	ND	10	9.886	98.86	10	9.705	97.05	1.848	20	80	120
Sulfate	4.151	10	14.48	103.3	10	14.22	100.6	1.826	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.

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8/10/2009 4:29:30 PM



Quality Control Report

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

Conoco Phillips San Juan 27-5 #34A

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 09071498
Lab Batch ID: R279831A

Method Blank

RunID: IC1_090803A-5139841 Units: mg/L
Analysis Date: 08/03/2009 13:24 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09071498-02F	MW-3
09071498-03F	MW-4
09071498-04F	MW-2

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

Laboratory Control Sample (LCS)

RunID: IC1_090803A-5139842 Units: mg/L
Analysis Date: 08/03/2009 13:42 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Ortho-phosphate (As P)	10.00	9.680	96.80	85	115

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

Sample Spiked: 09071529-01
RunID: IC1_090803A-5141485 Units: mg/L
Analysis Date: 08/03/2009 21:51 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
Ortho-phosphate (As P)	ND	100	101.1	101.1	100	102.5	102.5	1.371	20	80	120
Sulfate	101.2	100	217.4	116.2	100	213.9	112.7	1.632	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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*Sample Receipt Checklist
And
Chain of Custody*



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

Sample Receipt Checklist

Workorder:	09071498	Received By:	CAW
Date and Time Received:	7/29/2009 9:15:00 AM	Carrier name:	Fedex-Priority
Temperature:	2.9°C	Chilled by:	Water Ice

- | | | | |
|---|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition?
867026830154 - 0.3C, 867026830187-0.3C, 867026830176- 0.1C,
867026830165-2.9C | 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 ☐ |

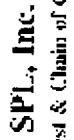
*VOA Preservation Checked After Sample Analysis

SPL Representative:
Client Name Contacted:

Contact Date & Time:

Non Conformance
Issues:

Client Instructions:



SPL, Inc.

Analysis Request & Chain of Custody Record

Client Name:	Tetra Tech / Conero Phillips		
Address:	6121 Indian School Rd Ste 200		
City:	Albuquerque, NM	State:	NM
Phone/Fax:	505 623 7844	X	505 237 8656
Client Contact:	Kelly Blanchard	Email:	Kelly.Blanchard@tetra-tech.com
Project Name/No.:	SAR, JNOG 27-5 #34A		

Site Location:				
Invoice To:	Cinco Phillips			
	SAMPLE ID	DATE	TIME	comp grab

MW-3	7.28.09	935	X
MW-3	7.28.09	935	X
MW-4	7.28.09	945	X
MW-4	7.28.09	945	X
MW-4	7.28.09	945	X
MW-4	7.28.09	945	X
MW-4	7.28.09	945	X
MW-4	7.28.09	945	X
MW-2	7.28.09	1030	X
MW-2	7.28.09	1030	X

Client/Consultant Remarks: Metals methods = 6010, 6020, 7470A, 7471A General Chem = All Barrels. Elutriate Addition: 5.12m to Pit 1	Laboratory Remarks:
--	---------------------

Requested TAT

☐ 1 Business Day ☐ Contract
☐ 2 Business Days ☐ Standard
☐ 3 Business Days
☐ Other _____

Rush TAT requires prior notice
 Rush TAT requires prior notice

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

500 Ambassador Caffery
 Scott, LA 70583 (337)

1.3.1. **ВВЕДЕНИЕ**

50

0907149d

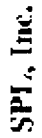
page. of

res.	Number of Countries	Requested Analysis					
		VOCs	SVOCs	TPH G80	TPH D80	Total Metals	General Chem
2/ONE	1					X	
1/ONE	2	X					X
1/ONE	3		X				
1/ONE	2			X			
1/ONE	3				X		
2/ONE	2					X	
2/ONE	1						X
2/ONE	2	X					
2/ONE	3						

	Intact?	Ice?	Tenn:
24	0	0	0
25	0	0	0

2. Received by:	6. Received by Laboratory:
4. Received by:	8. Received by Laboratory:
PMJ review (initial):	

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



Analysis Request 5: Chain of Custody Record

NY 100-111111-111

5
4
3
2
1

09071498	page 3 of 3
----------	-------------

Client Name: Tetra Tech / Conoco Phillips				Address: 6121 Indian School Rd. Ste. 200				City: Albuquerque				State: NM				Zip: 87106			
Phone/Fax: 505-237-8440				505-237-8632				Client Contact: Kelly Blanchard				Email: Kelly.blanchard@tetra-tech.com							
Project Name/No.: San Juan 27.5 #3/A				Site Name: San Juan 27.5 #3/A				Site Location: Conoco Phillips				Invoice To: SAMPLE ID							
DATE		TIME		comp		grab		PH		Number of Containers		Requested Analysis							
MW-2	7-28-09	1030				X	W	V	40	1	3	WCLs	TPH GAO						
MW-2	7-28-09	1030				X	W	A	1	1	2	TPH DRO	General Chem						
MW-2	7-28-09	1030				X	W	P	16	2	1								
MW-2	7-28-09	1030				X	W	P	1	2	2								
Duplicate	7-28-09	1030				X	W	V	40	1	3								
Trip Blank	7-28-09	1100				X	W	V	40	1	2								

Requested Analysis		Intact?		Temp?		PM review (initial):	
WCLs	TPH GAO						
TPH DRO	General Chem						
BTEX ONLY							

Laboratory remarks:		Special Reporting Requirements		Results:		Special Detection Limits (specify):	
Client/Consultant Remarks:		Requested TAT		1. Business Day		2. Received by:	
Metals Methods = 6010/6030/7470/7471A		Contract		2. Business Days		4. Received by:	
General Chem = Alkalinity, Boronide, Chloride Fluoride, Orthophosphate, Sulfate, Nitrate, Nitrite, PH, SC, TDS, Hardness		Standard		3. Business Days		6. Received by Laboratory:	
Support Doc: Level 3 QC: TX TRR: LA RECAP:		Relinquished by:		date		time	
Relinquished by:		date		date		time	
Relinquished by:		date		date		time	

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

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

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