3R - 425

RP WORKPLAN

02/22/2011

Terry S. Lauck
Site Manager

ConocoPhillips Company
Risk Management & Remediation
420 South Keeler Avenue
Bartlesville, OK 74004
Phone: 918.661.0935
E-mail: Terry.S.Lauck@conocophillips.com

ConocoPhillips

Mr. Glenn von Gonten
Acting Environmental Bureau Chief
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis DR
Santa Fe, NM 87505

February 22, 2011

Re: Remediation Plan for San Juan 29-7 Unit 37 (API No. 30-039-07643)
OCD Case No. 3R-425

Dear Mr. von Gonten:

Pursuant to your January 31, 2011 letter to Ms. Kelsi Harrington, of ConocoPhillips, enclosed is a document describing ConocoPhillips' subsurface assessment plan for the San Juan 29-7 Unit 37 gas well site. The plan also lists some potential remediation options. A complete evaluation of potential remedies will be conducted once the areal extent of hydrocarbon-impacted soil and groundwater is determined. The next phase of subsurface assessment is currently scheduled for the week of February 28, 2010.

ConocoPhillips will endeavor to keep NMOCD and Mr. Richard Hodgson, the surface owner, apprised of progress on this project. Please feel free to contact me if you have any questions.

Sincerely,

Terry S. Lauck

Cc: Mr. Brandon Powell, NMOCD – Aztec District Office
Mr. Richard Hodgson

3R425

TETRA TECH

Remediation Plan
Monitoring Well Installation and Groundwater Monitoring

San Juan 29-7 Unit 37
Rio Arriba County, New Mexico
API No. 30-039-07643
OCD Case No. 3R-425

Prepared for:

ConocoPhillips Company

Risk Management and Remediation
420 South Keeler Avenue
Bartlesville, OK 74004
(918) 661-0935 office

Prepared by:

Tetra Tech

6121 Indian School Road NE, Suite 200
Albuquerque, NM 87110
(505) 237-8440

February 2011

complex world CLEAR SOLUTIONS™

TABLE OF CONTENTS

LIST OF FIGURES

APPENDICES

1.0 PURPOSE AND NEED

This document presents the scope of work to be performed at the ConocoPhillips Company; (ConocoPhillips) San Juan 29-7 Unit 37 gas well production facility (Site) located within Unit Letter N, Section 12, Township 29N, Range 07W, Rio Arriba County, New Mexico (Latitude: 36.73552° N; Longitude: -107.52488° W) as seen in **Figure 1**. The Site is located on private land. The surface owner of the Site is Mr. Richard Hodgson.

This work is being conducted as follow-up to a hydrocarbon release in August of 2010 and subsequent excavation and vertical soil impact delineation. All work will follow New Mexico Oil Conservation Division (NMOCD) guidelines. The NMOCD is located at 1220 South St. Francis Drive, Santa Fe, NM 87505.

2.0 SITE HISTORY

The chronology of activities previously performed at the Site is presented below. The proposed scope of work for the Site is presented following the chronology section.

2.1 Site Activities

The following table summarizes activities that have occurred at the Site regarding the response to the August 2010 release discovery.

DATE	ACTIVITY
August 26, 2010	ConocoPhillips discovered a leaking inspection plate gasket on the condensate tank. All fluid was contained within the berm but none was recovered. Inventory reconciliation revealed a discrepancy of approximately 23 bbls.
September 16, 2010	Initial C-141 Release Notification and Corrective Action form for soil impacts was submitted to the NMOCD by ConocoPhillips.
September 24, 2010	Envirotech, Inc. (Envirotech) of Farmington, NM conducted a brief site assessment and confirmation sampling of an excavation at the site with the dimensions of 60 feet long (north to south) by 20 feet wide (east to west) with a total depth on the north end of approximately 34 feet below ground surface (bgs). Soil samples collected from the bench, north wall, and excavation bottom exceeded NMOCD Guidelines for Remediation of Leaks, Spills and Releases field screening limits. Samples from the east, west, north, south, bench and bottom of the excavation were collected in laboratory prepared containers, transported on ice to Envirotech and analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021, total petroleum hydrocarbons (TPH) by EPA Method 8015. Analytical results were above regulatory standards for both BTEX and TPH for the north wall and excavation bottom samples. The north wall sample was also above regulatory standards for benzene (**Appendix A and D**). Excavation was to continue.
November 10, 2010	Envirotech performed another round of confirmatory sampling of the excavation at the site. Excavation dimensions as of this date had reached 60 feet long by 40 feet wide and 34 feet below ground surface. Samples were collected from the east, west, south, north, bottom half of south and bottom half of north walls. All samples except for bottom half of south and north walls were below NMOCD field screening limits. Samples from the bottom half of south and north walls were collected in laboratory prepared containers, transported on ice to Envirotech and analyzed for BTEX and TPH by EPA Methods 8021 and 8015 respectively. Analytical results from the bottom half of north wall sample were above regulatory standards for benzene, BTEX and TPH. Analytical

	(November 10, 2010 continued) results from the bottom half of south wall sample were above the regulatory standard for TPH. The maximum practical extent had been reached to the north and the bottom of the excavation so further delineation by excavation was not possible in those directions. Staining above the level of the excavation bench on the south wall was also observed on this date. A sample collected from the area of staining was field screened and was above the range of the photo-ionization organic vapor detector (PID). Further excavation to the south was required. The northern part of the excavation was backfilled with verbal approval from Brandon Powell of the NMOCD.
November 23, 2010	Envirotech performed additional confirmation sampling at the site. A composite sample was collected from the south wall and was above regulatory standards for both field screening and laboratory analysis for benzene, BTEX and TPH. Excavation was to continue to the south.
December 3, 2010	Envirotech completed confirmation sampling on a second excavation area to the south of the original excavation. The dimensions of the southern excavation were approximately 47 feet long by 40 feet wide and approximately 30 feet bgs. Samples were collected from the south, east, and west walls in addition to sample from the bottom of the excavation for field screening. The south, east and west wall samples were below regulatory field screening limits. The sample from the bottom of the excavation was above field screening limits and therefore was packed into laboratory prepared containers and transported on ice to Envirotech for analysis of BTEX and TPH by EPA Methods 8021 and 8015 respectively. Analytical results for the south excavation bottom sample were above the regulatory standard for TPH. The maximum practical vertical extent of the south excavation had been reached.
January 3, 2011	Backfilling of the entire area, both north and south excavations, to within six feet of the ground surface was completed.
January 12 - 14, 2011	One soil boring, B-1, was advanced to a total depth of 123.5 feet from the top of the backfilled excavation by Enviro Drill, Inc., with oversight by Tetra Tech, Inc. PID readings were above field screening levels until total depth was reached. Groundwater was encountered at approximately 105 feet below the top of the backfilled excavation and approximately 111 feet bgs. Both soil samples and a groundwater sample were collected in laboratory prepared containers, packed on ice and sent under chain of custody documentation to Southern Petroleum Laboratories (SPL) in Houston, TX to be analyzed for BTEX and TPH by EPA Methods 8260B (methanol extraction) and 8215B respectively for both soil and groundwater . The groundwater sample was also analyzed for polynuclear aromatic hydrocarbons (PAH) by EPA Method 8270C. Analytical results for a soil sample collected from 30-32 feet below the top of excavation was above NMOCD regulatory standards for BTEX and TPH. Groundwater analytical results were above New Mexico Water Quality Control Commission standards for benzene, toluene, ethylbenzene and total xylenes (**Appendix A and D**). Soil boring B-1

	(January 12-14, 2011 continued) was backfilled with bentonite and grout by Enviro-Drill.
January 27, 2011	Backfilling of the remainder of the open excavation was completed.
January 28, 2011	Initial C-141 Release Notification and Corrective Action form for groundwater impacts was submitted to the NMOCD by ConocoPhillips.
January 31, 2011	ConocoPhillips receives a letter from Glenn Von Gonten of the NMOCD outlining the requirement to submit a Remediation Plan within 30 days of this date.

3.0 SCOPE OF WORK

The Scope of Work for Site activities is described below. Work conducted at the Site will consist of field preparation prior to the start of work (Section 3.1); a Site investigation (Section 3.2) consisting of soil boring advancement and soil sample collection (Section 3.2.1); soil boring completion to groundwater monitoring wells (Section 3.2.2); proper handling and disposal of investigation-derived waste (Section 3.2.3); and groundwater monitoring (Section 3.2.4). Reporting is discussed in Section 3.3, and quality assurance/quality control (QA/QC) is discussed in Section 4.0. Section 5.0 discusses additional measures to delineate soil and groundwater impacts. Section 6.0 discusses possible future remediation options which will be determined following monitoring well installation and initial soil and groundwater sampling. References used for completion of this report are noted in section 7.0. **Figure 1** is a Site location map, **Figure 2** displays the Site layout and proposed location of groundwater monitoring wells to be installed, and **Figure 3** is a diagram of typical monitoring well completion. Appendices follow the Figures and include:

- Appendix A – Analytical Results Summary Tables
- Appendix B – B-1 Soil Boring Log
- Appendix C – Soil Boring Log, Soil Sampling, Monitoring Well Completion, Groundwater Sampling Field Forms
- Appendix D – Laboratory Analytical Reports

3.1 Pre Field Work Preparation

The proposed groundwater monitoring well location map (**Figure 2**) will be reviewed and approved by ConocoPhillips Risk Management and Remediation personnel and San Juan Business Unit personnel. Once these well locations have been approved, New Mexico One-Call will be contacted to perform a utility locate within a 450 foot radius from the San Juan 29-7 Unit 37 wellhead. Additionally, monitoring well installation permits will be acquired by Enviro-Drill Inc. of Albuquerque, NM (Enviro-Drill), and a site specific Health and Safety Plan (HASP) will be prepared by Tetra Tech prior to the start of field work.

3.2 Site Investigation

3.2.1 Soil Boring Advancement and Soil Sample Collection

The subject Site is scheduled to have four (4) soil borings completed into two-inch diameter groundwater monitoring wells in order to define the groundwater flow direction and to determine the extent of petroleum hydrocarbon-impacts to groundwater. Borings will be advanced until auger refusal is met or until a sufficient depth into groundwater is achieved. Depth to groundwater at the Site is expected to be found at approximately 110 feet bgs.

Prior to the start of drilling operations, each boring location will be pre-cleared in order to insure that no underground utilities within the Site will be damaged by drilling equipment. Pre-clearing of each boring will be performed by Riley industrial Services of Farmington, New Mexico, using a vacuum truck and water pressure to advance each hole to approximately ten (10) inches in diameter and five (5) feet deep. Two soil samples will be collected from the vadose zone to just above the water table and the lithology of each borehole recorded to total depth during the advancement of each boring using split spoon sampling techniques. The soil samples collected from the vadose zone will be field screened with a PID using the heated headspace method. The results will be recorded on the boring log, and the soil sample with the highest PID reading as well as the sample collected from directly above the groundwater interface will be submitted to Accutest Laboratories of Houston, TX to be analyzed for the following parameters:

- Volatile Organic Compounds (VOCs), EPA Method 8260B
- Polynuclear Aromatic Hydrocarbons (PAHs), EPA Method 8270C
- Total petroleum hydrocarbons (TPH), EPA Method 8015B
- Total metals - aluminum, boron, iron, arsenic, barium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, zinc by EPA Method 6010B and mercury by EPA Method 7471A
- General chemistry (as described in 40 CFR 136.3), including
    - Alkalinity, EPA Method SM2320B
    - Bromide, chloride, fluoride, orthophosphate, sulfate, nitrate/nitrite, EPA Method 300.0
    - Bicarbonate/carbonate, EPA Method 310.1
    - pH, EPA Method 4500-HB
    - Specific conductance, EPA Method E120.1

3.2.2 Groundwater Monitoring Well Construction

Enviro-Drill will be utilized as the drilling contractor at the Site, and drilling operations will be supervised by Tetra Tech personnel. Groundwater monitoring wells will be constructed using two-inch diameter polyvinyl chloride (PVC) casing and at least 15 feet of PVC, 0.010 inch slot screen (approximately 10 feet of the screen to be installed below the water table). The installed groundwater monitoring wells will contain a sand filter pack to 2-feet above the top of the screen, with a sand collar above the filter pack. A two-foot bentonite seal will be placed on top of the sand collar, followed by cement grouting to the land surface. Each well will be completed with a locking, stick-up well monument set in a 3-foot by 3-foot concrete pad (**Figure 3**). The ground water monitoring wells will be developed using a surge block and bailer or purge pump, and the wells will be incorporated into a semi-annual groundwater monitoring program initially.

3.2.3 Investigation Derived Waste

All well development water will be placed into the on-Site produced water tank. Soil cuttings will be placed on polyethylene sheeting and will be covered in the event of precipitation during field activities. Once each soil boring is complete, a representative sample of soil cuttings from each soil boring will be field screened using a PID and will be spread on-Site if the results are less than 100 ppm. In the event that soil cutting PID results are greater than 100 ppm, soil cuttings will be containerized in 55 gallon drums and transported by Envirotech to the Envirotech Soil Remediation Facility (or other ConocoPhillips-approved waste disposal facility).

3.2.4 Groundwater Monitoring

During the first regularly scheduled semi-annual groundwater monitoring event covered under this work plan, an expanded baseline groundwater parameter list will be submitted for laboratory analysis. Constituents of concern (COCs) detected in groundwater at concentrations above the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Quality Standards during the first groundwater monitoring event will be carried forward for analyses in subsequent groundwater monitoring events.

The baseline parameter list for groundwater includes analyses of the following parameters:

- VOCs, EPA Method 8260B
- PAHs, EPA Method 8270C
- TPH, gasoline range organics (GRO), EPA Method 8015B
- TPH, diesel range organics (DRO), EPA Method 8015B
- Dissolved metals – aluminum, boron, iron arsenic, barium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver and zinc by EPA Method 6010B
- Total metals – mercury by EPA Method 7470A
- General chemistry (as described in 40 CFR 136.3), including
    - Alkalinity, EPA Method SM2320B
    - Bromide ,chloride, fluoride, orthophosphate, sulfate, nitrate/nitrite, EPA Method 300.0
    - Bicarbonate/carbonate, EPA Method 310.1
    - pH, EPA Method 4500-HB
    - Specific conductance, EPA Method E120.1
    - TDS, EPA Method SM2540C
    - Hardness, EPA Method SM2430C

Semi-annual groundwater sampling will be conducted in March and September of 2011 at the Site. A dedicated, 1.5 inch polyethylene bailer will be used to purge and sample each well. A groundwater sample will be collected once specific conductance, pH, dissolved oxygen, and temperature are determined to have stabilized (within a 10% margin) or once three well

volumes have been purged. Records of each sampling event will be kept on Tetra Tech groundwater sampling forms and in a bound field notebook. Groundwater samples will be containerized in bottles supplied by Accutest Laboratories of Houston, Texas. The groundwater samples will be placed on ice in a cooler under chain of custody documentation and submitted to the laboratory for analysis. Groundwater samples will be shipped by overnight courier.

3.3 Reporting

Semi-annual groundwater monitoring reports will be prepared for the Site. The first semi-annual report will include a summary of the groundwater monitoring well installation and a brief narrative of the sampling events. In general, the reports will include the date(s) the events occurred, copies of sampling field forms from each sampling event, copies of laboratory chain-of-custody documentation and results, laboratory quality assurance/quality control (QA/QC) documentation, tabulated groundwater elevations, soil results, groundwater concentration/elevation maps, a generalized geologic cross section, and a summary of key findings. Starting with the second semi-annual report, the groundwater elevations and groundwater analytical results from the previous quarter(s) will be tabulated with the results from the current quarter. For each monitoring event, a hard copy of the report will be submitted to the NMOCD.

Based on the extent of groundwater impacts determined by laboratory analysis, Site characterization and interpretation of analytical data by Tetra Tech, it is possible that the frequency of groundwater monitoring events may change. If the groundwater monitoring schedule is revised at any time, the NMOCD will be notified. Once groundwater results begin to approach compliance, quarterly sampling will begin. Following eight (8) quarters of compliance, no further action will be requested.

A C-141 form (Release Notification and Corrective Action) was completed and submitted to NMOCD for soil impacts at the Site by ConocoPhillips on September 16, 2010 and a C-141 form for groundwater impacts was submitted on January 28, 2011.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

A quality assurance evaluation will be conducted by the analytical laboratory on collected samples to check for accuracy, precision and reliability of each reported analyte concentration. Sample spiked-matrix batch samples will be analyzed to determine the accuracy of laboratory results. Quality assurance documentation will be provided on the laboratory report.

At least one field audit of investigation and sampling protocol will be conducted by the project manager during the period covered by this work plan. Variations from standard operating procedures will be documented and corrected, if necessary.

5.0 ADDITIONAL MEASURES TO DELINEATE SOIL AND GROUNDWATER IMPACTS

If impacts are not fully delineated following the initial monitoring well installation and sampling event, additional wells will be added to the site in order to achieve three (3) dimensional delineation. Proposed additional monitoring wells are shown on **Figure 2**. If necessary, those wells will be installed and sampled according to this plan.

6.0 REMEDIATION OPTIONS

Tetra Tech will evaluate the data collected from boring installation and monitoring well sampling to determine an appropriate remediation option based upon site characteristics, risk, landowner considerations, and NMOCD input.

6.1 Soil Vapor Extraction

Based on results of the initial monitoring well installation and soil and groundwater sampling events, soil vapor extraction (SVE) might be considered a viable option for in situ remediation. The details of this option will depend on investigation findings and will be discussed in detail if SVE becomes the clear path forward.

6.2 Chemical Oxidation

Based on results of the initial monitoring well installation and soil and groundwater sampling events, chemical oxidation might be considered a viable option for in situ remediation. This would involve using a drill rig to advance several injection points in and around the impacted area in order to deliver an oxidizing compound to soil and groundwater. The network of monitoring wells would be used to monitor effects and progress and determine need for additional treatments.

6.3 Monitored Natural Attenuation

Based on results of the initial monitoring well installation and soil and groundwater sampling events, monitored natural attenuation might be considered a viable option for in situ remediation. The network of installed monitoring wells would be used to evaluate the physical, chemical, and biological processes that contribute to naturally occurring biodegradation and other non destructive attenuation mechanisms.

7.0 REFERENCES

Envirotech Incorporated (2010). *Confirmation Sampling Report* for ConocoPhillips Company San Juan 29-7 Unit 37, Section 12, Township 29N, Range 7W, Rio Arriba County, New Mexico. Prepared for ConocoPhillips. Report Dated January 11, 2011. 5 pp (not including Figures, Tables, and Appendices).

New Mexico Oil Conservation Division (1993). *Guidelines for Remediation of Leaks, Spills and Releases.* August 13, 1993. 16 pp. (not including Appendices).

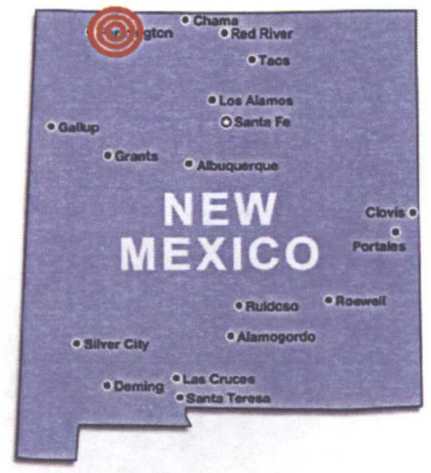
FIGURES

1.) Site Location Map
2.) Boring Location and Proposed Monitoring Well Location Map
3.) Typical Monitoring Well Completion Diagram

FIGURE 1.

Site Location Map

ConocoPhillips Company
San Juan 29-7 Unit 37
Rio Arriba County, NM



ConocoPhillips Company
San Juan 29-7 Unit 37 Site Location

Latitude: 36.73552° N
Longitude: -107.52488° W

N

ConocoPhillips

TETRA TECH, INC.

FIGURE 2:
SOIL BORING AND PROPOSED MONITORING WELL LOCATION MAP

CONOCOPHILLIPS COMPANY
SAN JUAN 29-7 UNIT 37
GAS PRODUCTION WELL SITE
Unit Letter N, Sec 12, T29N, R07W
Rio Arriba County, New Mexico

LEGEND

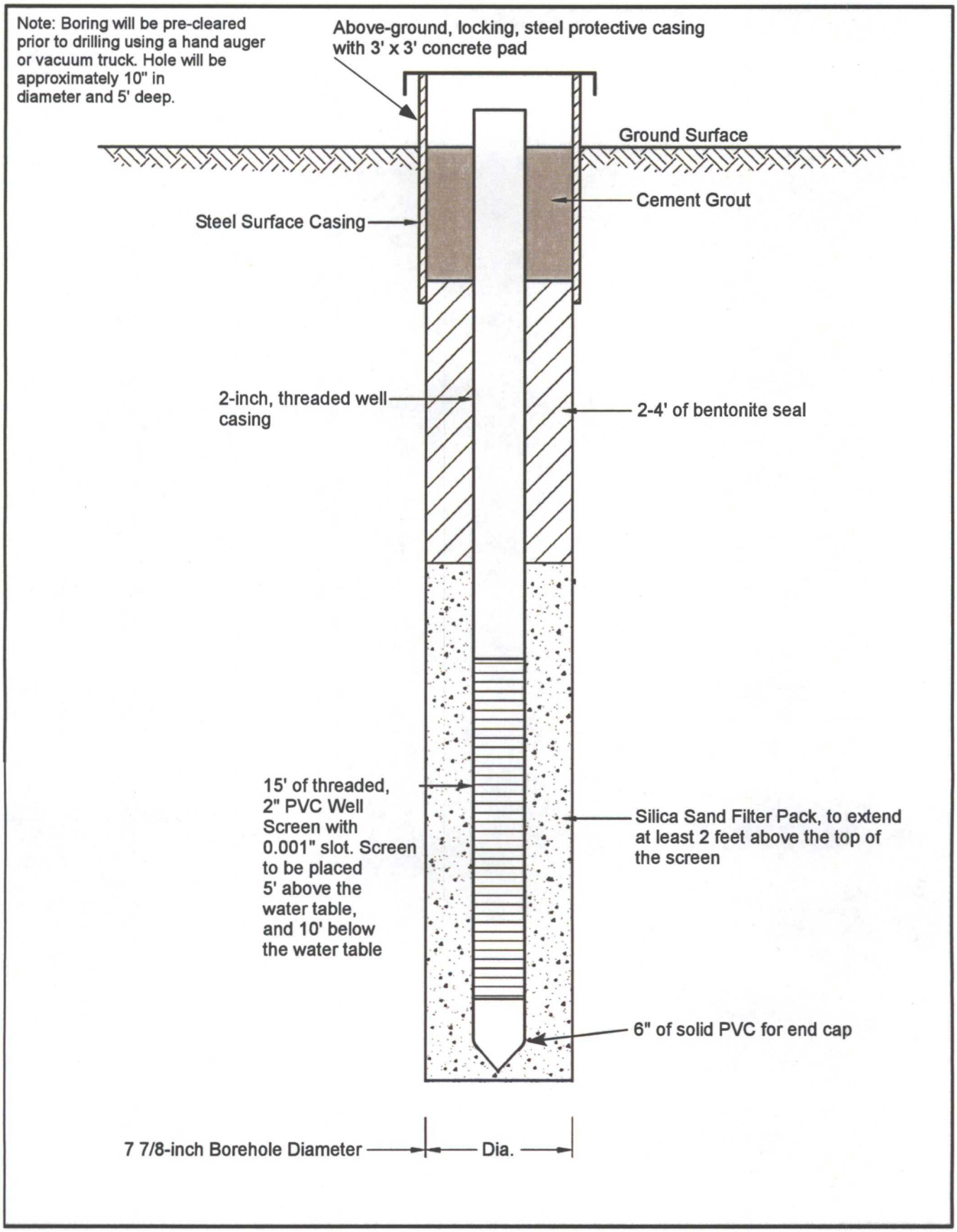
- ConocoPhillips San Juan 29-7 Unit 37 Wellhead
- Completed Boring Location B-1 to 123.5 feet bgs
- Proposed Monitoring Well Locations
- Possible Additional Monitoring Well Locations
- Approximate 2010 Excavation Location
- Approximate Location of Current San Juan 29-7 Unit 37 Tank Placement (aerial image shows prior historic tank placement)

N

0 FEET 50

ConocoPhillips

TETRA TECH, INC.



February 2010

Figure 3
Typical Monitoring Well Completion Diagram

APPENDIX A

Analytical Results Summary Tables

Table 1, Summary of Analytical Results
ConocoPhillips
Confirmation Sampling Report
San Juan 29-7 #37 (hBr)
Project No. 92115-1437
November 2010

Sample Number	Sample Description	Date	BTEX (ppm) EPA Method 8021	Benzene (ppm) EPA Method 8021	TPH (ppm) EPA Method 418.1	Organic Vapors (ppm)	DRO/GRO (ppm) EPA Method 8015
NA	NMOCD Standards	NA	50	10	100	100	100
Northern Excavation Samples							
1	Bench	9/24/2010	0.189	0.0133	**100**	**454**	4.6
2	West Wall	9/24/2010	NS	NS	44	46	NS
3	East Wall	9/24/2010	ND	ND	72	**312**	ND
4	South Wall	9/24/2010	NS	NS	28	24.4	NS
5	North Wall	9/24/2010	**266**	**15.9**	**6,400**	**2060**	**34,800**
6	Bottom	9/24/2010	**50.1**	0.155	**2,670**	**1680**	**1,270**
1	South Wall	11/10/2010	NS	NS	16	47.8	NS
2	South Bottom	11/10/2010	35.9	0.29	**5680**	**OVR**	**1,440**
3	North Wall	11/10/2010	NS	NS	80	8.7	NS
4	E+W Walls	11/10/2010	NS	NS	44	21.6	NS
5	North Bottom	11/10/2010	**193**	**12.6**	**24,200**	**1725**	**30,600**
1	South Wall	11/23/2010	31.5	0.005	**2500**	**364**	**487**
Southern Excavation Samples							
1	Bottom	12/3/2010	**177**	1.29	**19,600**	**218**	**5,530**
2	West Wall	12/3/2010	NS	NS	56	12.0	NS
3	East Wall	12/3/2010	NS	NS	76	6.0	NS
4	South Wall	12/3/2010	NS	NS	80	7.0	NS

Values in BOLD are above Regulatory Limits
NS = Not Sampled
ND = Non detect

Table prepared by Envirotech, Inc. of Farmington, NM

Table 2. San Juan 29-7 Unit 37 Site Soil Boring Laboratory Analytical Results for B-1

Constituent			Sample ID (soil samples collected January 11th-14th, 2011)							
VOCs (BTEX only)	**Method**	**Units**	**B-1 (30-32 feet)**	**B-1 (66-68 feet)**	**B-1 (68-70 feet)**	**B-1 (86-88 feet)**	**B-1 (88-90 feet)**	**B-1 (92-94 feet)**	**B-1 (122.5-123.5 feet)**	**NMOCD**
Benzene	8260B	mg/kg - dry	0.25	< 0.0064	< 0.0058	< 0.0054	< 0.0056	< 0.0056	< 0.005	**10**
Toluene	8260B	mg/kg - dry	48	0.11	0.014	< 0.0054	< 0.0056	0.006	0.096	**NE**
Ethylbenzene	8260B	mg/kg - dry	11	0.082	< 0.0058	< 0.0054	< 0.0056	< 0.0056	0.022	**NE**
Total Xylenes	8260B	mg/kg - dry	374	1.88	0.089	< 0.0054	0.017	0.017	0.347	**NE**
Total BTEX	8260B	mg/kg - dry	**433.25**	2.072	0.103	< 0.0054	0.017	0.023	0.465	**50**
Petroleum Hydrocarbons	**Method**	**Units**	**B-1 (30-32 feet)**	**B-1 (66-68 feet)**	**B-1 (68-70 feet)**	**B-1 (86-88 feet)**	**B-1 (88-90 feet)**	**B-1 (92-94 feet)**	**B-1 (122.5-123.5 feet)**	**NMOCD**
TPH Gasoline Range	8015B	mg/kg - dry	**5300**	14	0.35	< 0.1	< 0.1	0.14	0.11	**100**
TPH Diesel Range	8015B	mg/kg - dry	**380**	11	12	< 5	< 5	< 5	ND	

Table 3. San Juan 29-7 Unit 37 Site Groundwater Sample from B-1 (collected from drill rig augers in boring)

Constituent			Sample ID (collected January 14th, 2011)	
VOCs (BTEX only)	**Method**	**Units**	**B-1 Water**	**NMWQCC Standard**
Benzene	8260B	µg/L	**930**	**10**
Toluene	8260B	µg/L	**15000**	**750**
Ethylbenzene	8260B	µg/L	**1400**	**750**
Total Xylenes	8260B	µg/L	**18800**	**620**
SVOCs	**Method**	**Units**	**B-1 Water**	**NMWQCC Standard**
Naphthalenes	8270C	µg/L	< 10	**30**
Petroleum Hydrocarbons	**Method**	**Units**	**B-1 Water**	**NMWQCC Standard**
TPH Gasoline Range	8015B	mg/L	73	**NE**
TPH Diesel Range	8015B	mg/L	1.4	**NE**

Notes:
NMOCD = New Mexico Oil Conservation Division recommended action level
NMWQCC = New Mexico Water Quality Control Commission Standard
Results shown in **BOLD** type are in exceedance of NMOCD recommended soil action levels or NMWQCC groundwater standards
B = soil boring
VOCs = Volatile organic compounds
SVOCs = Semi-volatile organic compounds
mg/kg - dry = Milligrams per kilogram (parts per million), analyzed after residual water removed from the soil
µg/L = Micrograms per liter (parts per billion)
NE = Not established

APPENDIX B

B-1 Soil Boring Log

PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Cassie Brown

ELEVATION: GROUND SURFACE (msl): 6293 feet

GROUNDWATER ELEVATION (msl): 6188 feet

REMARKS: Once total depth was reached, boring was backfilled with bentonite and grout to excavation surface.

Depths are measured from excavation surface, ~ 6 ft. bgs.

SOIL BORING NO. B-1

DRILL TYPE: CME 75

Hallow Stem Auger

BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: Envir-Drill, Inc.

DATE/TIME: HOLE STARTED: January 12, 2011 at 10:30 AM

DATE/TIME: COMPLETED: January 14, 2011 at 10:00 AM

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
6290			Fill: Fill material used to backfill excavation.			0
6285						5
6280						10
6275						15
6270						20
6265						25
6260	X	B-1 (30-32)	Silty Sand: Light brown, dry, very loose, subrounded, silty, fine grained sand with clay matrix. Grades slowly to very fine grained sand throughout. Six inch, silty, clay layer at approximately 34 feet.	SC	2133 2686 1986 2449 1868 1953 1977	30 35 40
6255						

Total depth = 123.5 feet

TETRA TECH

BORING LOG

PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Cassie Brown

ELEVATION: GROUND SURFACE (msl): 6293 feet

GROUNDWATER ELEVATION (msl): 6188 feet

REMARKS: Once total depth was reached, boring was backfilled with bentonite and grout to excavation surface.

Depths are measured from excavation surface, ~ 6 ft. bgs.

SOIL BORING NO. B-1

DRILL TYPE: CME 75

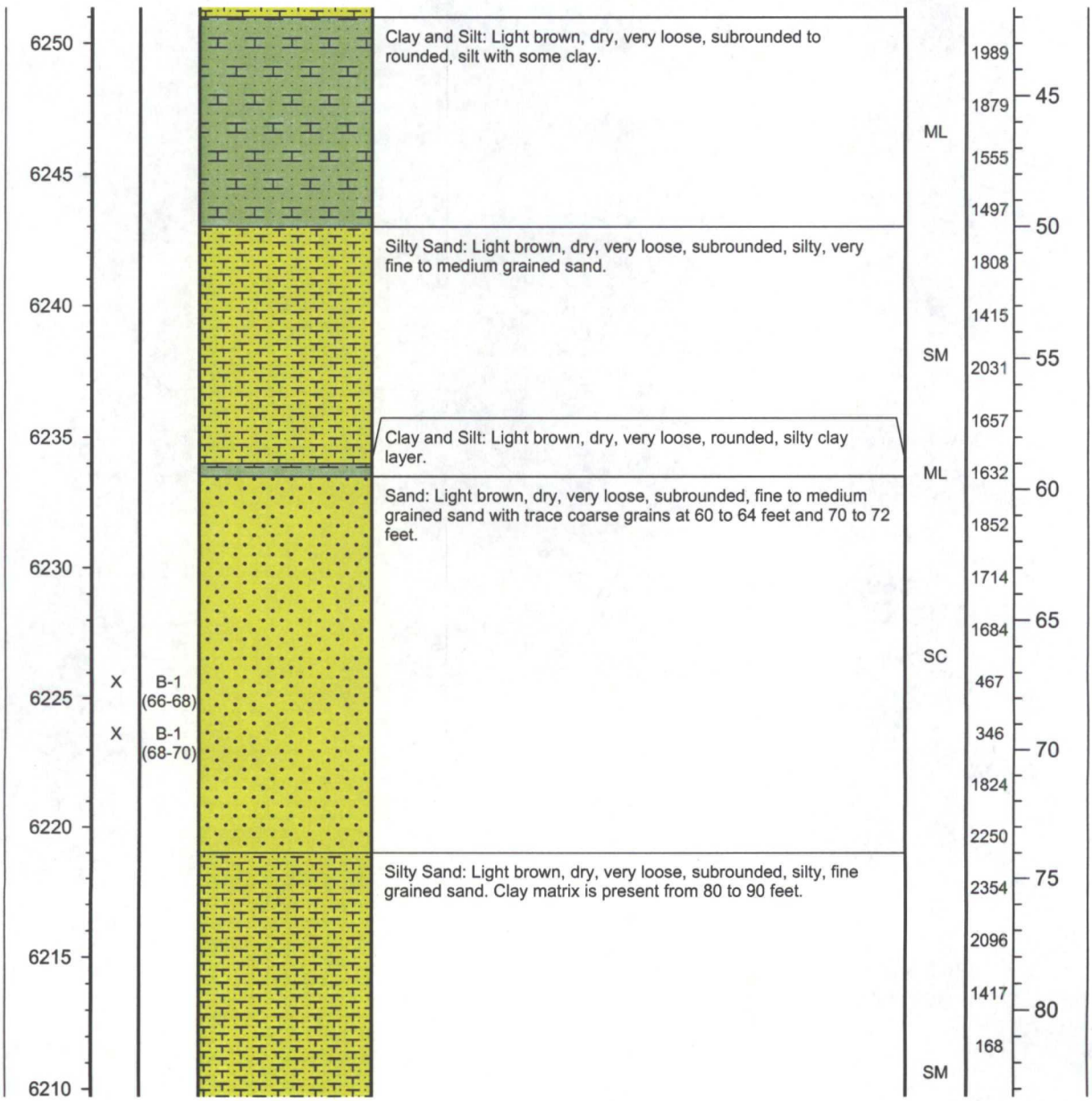
Hallow Stem Auger

BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: Envir-Drill, Inc.

DATE/TIME: HOLE STARTED: January 12, 2011 at 10:30 AM

DATE/TIME: COMPLETED: January 14, 2011 at 10:00 AM



PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Cassie Brown

ELEVATION: GROUND SURFACE (msl): 6293 feet

GROUNDWATER ELEVATION (msl): 6188 feet

REMARKS: Once total depth was reached, boring was backfilled with bentonite and grout to excavation surface.

Depths are measured from excavation surface, ~ 6 ft. bgs.

SOIL BORING NO. B-1

DRILL TYPE: CME 75

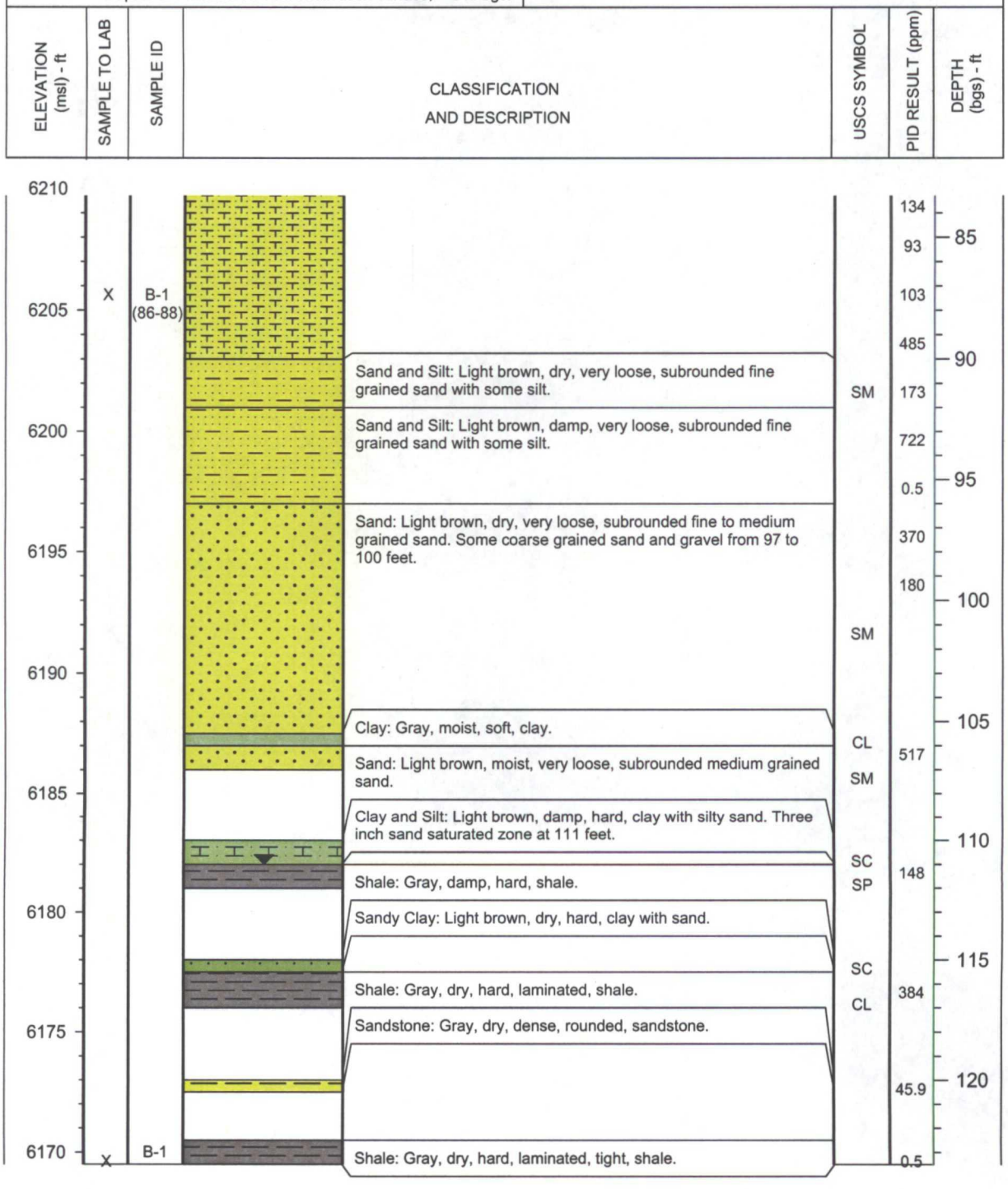
Hallow Stem Auger

BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: Envir-Drill, Inc.

DATE/TIME: HOLE STARTED: January 12, 2011 at 10:30 AM

DATE/TIME: COMPLETED: January 14, 2011 at 10:00 AM



APPENDIX C

Soil Boring Log, Soil Sampling, Monitoring Well Completion and Groundwater Sampling Field Forms

Lithology Record

TETRA TECH, INC.

Project/Client: ______
Borehole: ______ **Method:** ______
Geologist: ______
Date: ______
Driller: ______

Page ___ of ___

Interval (ft.)	Group Name and Description	USCS Class	Color	Moisture Content	Consistency of Cohesive Soils (Clay)	Density of Non-Cohesive Soils (Sand)	Angularity/Shape of Particles	Cementation & Type	Structure	Dry Strength	Plasticity	Additional Information	% Rec. (ft/ft)
Blow Ct. Sample: Y N Analytes: Time:	PID:			dry damp moist wet sat.	v. soft soft firm (stiff) hard v. hard	v. loose loose m. dense dense v. dense	angular subangular subrounded rounded flat elongated	none weak moderate strong CHOOSE: Calcareous OR Silicious	stratified laminated fissured slickensided blocky lensed homogenous interbedded	none low medium high v. high	nonplastic low medium high		
Blow Ct. Sample: Y N Analytes: Time:	PID:			dry damp moist wet sat.	v. soft soft firm (stiff) hard v. hard	v. loose loose m. dense dense v. dense	angular subangular subrounded rounded flat elongated	none weak moderate strong CHOOSE: Calcareous OR Silicious	stratified laminated fissured slickensided blocky lensed homogenous interbedded	none low medium high v. high	nonplastic low medium high		
Blow Ct. Sample: Y N Analytes: Time:	PID:			dry damp moist wet sat.	v. soft soft firm (stiff) hard v. hard	v. loose loose m. dense dense v. dense	angular subangular subrounded rounded flat elongated	none weak moderate strong CHOOSE: Calcareous OR Silicious	stratified laminated fissured slickensided blocky lensed homogenous interbedded	none low medium high v. high	nonplastic low medium high		
Blow Ct. Sample: Y N Analytes: Time:	PID:			dry damp moist wet sat.	v. soft soft firm (stiff) hard v. hard	v. loose loose m. dense dense v. dense	angular subangular subrounded rounded flat elongated	none weak moderate strong CHOOSE: Calcareous OR Silicious	stratified laminated fissured slickensided blocky lensed homogenous interbedded	none low medium high v. high	nonplastic low medium high		

TETRA TECH

SOIL SAMPLING FIELD FORM

Project No. _____ Project Name: _____ Date: _____

Station: _____ Station No.: _____

Sampled By: _____ Mean Time: _____ SMS Control No.: _____

Record No.: _____ Sample Purpose: _____

SAMPLES COLLECTED

Type:

% Clay _____

% Silt _____

% Sand _____

% Gravel _____

Color:

☐ Dry

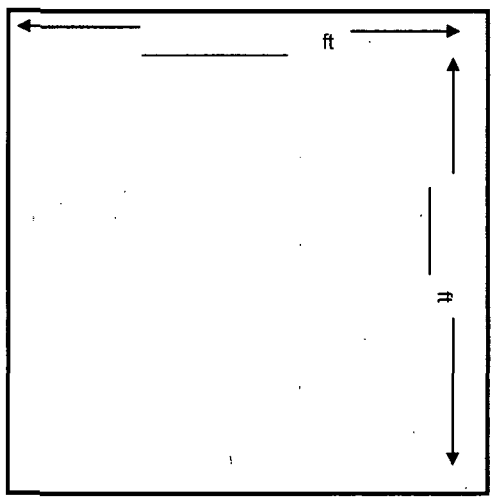
☐ Moist

☐ Saturated

USCS Classification

GW	SW	ML
GP	SP	CL
GM	SM	OL
GC	SC	MH
		CH
		OH
		PT

SAMPLING PATTERN SKETCH



Sample depth _____

Sample volume _____

☐ Primary sample

☐ Duplicate sample

☐ Other _____

Containers:

☐ 250 mL plastic

☐ 500 mL plastic

☐ 1000 mL plastic

☐ Other _____

Analysis:

☐ Metals

☐ Radionuclides

☐ Anions

☐ Other _____

Comments:

Reviewed by: _____ **Date:** _____

TETRA TECH, INC.

Well Completion Diagram

Well ID MW-

Job Name _____

Job No. _____ Date _____

Project Manager _____

Well I.D. _____

Field Geologist _____

Driller _____

Equipment _____

Materials

_____ Pounds _____ Filter Pack

_____ Pounds _____ Bentonite Seal

_____ Gallons _____ Grout

_____ Pounds _____ Concrete

_____ Feet of native fill/ slough

_____ Feet of _____ inch _____ pvc _____ Blank Casing

_____ Feet of _____ inch _____ Slotted Screen

_____ Feet of _____ Outer Casing

_____ Feet of _____ Sump/ Silt Trap

Placement Method _____

Notes _____

_____

Development

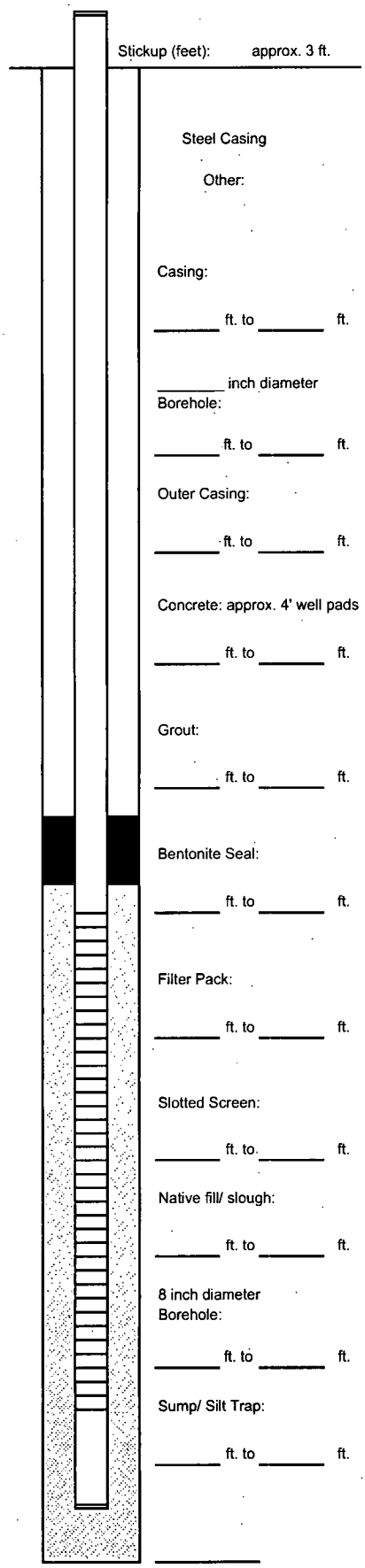
Method _____

Date _____

Amount Purged _____ gallons

Notes _____

_____



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name _____ Page _____ of _____

Project No. _____

Site Location _____

Site/Well No. MW - _____ Coded/ Replicate No. _____ Date _____

Weather _____ Time Sampling Began _____ Time 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 _____ Water-Level Elevation _____

Held _____ Depth to Water Below MP _____ Diameter of Casing 2"

Wet _____ Water Column in Well _____ Gallons Pumped/Bailed Prior to Sampling _____

Gallons per Foot _____

Gallons in Well _____ Sampling Pump Intake Setting (feet below land surface) _____

Purging Equipment Purge pump / Bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity (µS/cm³)	TDS (g/L)	DO (mg/L)	DO %	ORP (mV)	Volume (gal.)

Sampling Equipment Purge Pump/Bailer

Constituents Sampled	Container Description	Preservative

Remarks _____

Sampling Personnel _____

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

APPENDIX D

Laboratory Analytical Reports

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	1	Date Reported:	12/20/2010
Sample ID:	Bench	Date Sampled:	9/24/2010
Sample Matrix:	Soil	Date Analyzed:	9/24/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**100**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Sarah Rowland, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	2	Date Reported:	12/20/2010
Sample ID:	West Wall	Date Sampled:	9/24/2010
Sample Matrix:	Soil	Date Analyzed:	9/24/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**44**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Sarah Rowland, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	3	Date Reported:	12/20/2010
Sample ID:	East Wall	Date Sampled:	9/24/2010
Sample Matrix:	Soil	Date Analyzed:	9/24/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**72**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Sarah Rowland, EIT
Printed

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	4	Date Reported:	12/20/2010
Sample ID:	South Wall	Date Sampled:	9/24/2010
Sample Matrix:	Soil	Date Analyzed:	9/24/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**28**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Sarah Rowland, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	5	Date Reported:	12/20/2010
Sample ID:	North Wall	Date Sampled:	9/24/2010
Sample Matrix:	Soil	Date Analyzed:	9/24/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**6,400**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Sarah Rowland, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	6	Date Reported:	12/20/2010
Sample ID:	Bottom	Date Sampled:	9/24/2010
Sample Matrix:	Soil	Date Analyzed:	9/24/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**2,670**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Sarah Rowland, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 24-Sep-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	158	161
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

Analyst — Date: 12/20/2010

Sarah Rowland, EIT
Print Name

Review — Date: 12/20/2010

Toni McKnight, EIT
Print Name

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	1	Date Reported:	12/20/2010
Sample ID:	South Wall	Date Sampled:	11/10/2010
Sample Matrix:	Soil	Date Analyzed:	11/10/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**16**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	2	Date Reported:	12/20/2010
Sample ID:	South Bottom	Date Sampled:	11/10/2010
Sample Matrix:	Soil	Date Analyzed:	11/10/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**5,680**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	3	Date Reported:	12/20/2010
Sample ID:	North Wall	Date Sampled:	11/10/2010
Sample Matrix:	Soil	Date Analyzed:	11/10/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**80**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	4	Date Reported:	12/20/2010
Sample ID:	E+W Walls	Date Sampled:	11/10/2010
Sample Matrix:	Soil	Date Analyzed:	11/10/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**44**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	5	Date Reported:	12/20/2010
Sample ID:	North Bottom	Date Sampled:	11/10/2010
Sample Matrix:	Soil	Date Analyzed:	11/10/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**24,200**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 10-Nov-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	246	238
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

Analyst

12/20/2010
Date

Robyn S. Jones, EIT
Print Name

Review

12/20/2010
Date

Toni McKnight, EIT
Print Name

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	1	Date Reported:	12/20/2010
Sample ID:	South Wall	Date Sampled:	11/23/2010
Sample Matrix:	Soil	Date Analyzed:	11/23/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**2,500**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Scott Gonzales, FT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 23-Nov-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	246	250
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

Analyst

12/20/2010
Date

Scott Gonzales, FT
Print Name

Review

12/20/2010
Date

Toni McKnight, EIT
Print Name

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	1	Date Reported:	12/20/2010
Sample ID:	Bottom	Date Sampled:	12/3/2010
Sample Matrix:	Soil	Date Analyzed:	12/3/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**19,600**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	2	Date Reported:	12/20/2010
Sample ID:	West Wall	Date Sampled:	12/3/2010
Sample Matrix:	Soil	Date Analyzed:	12/3/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**56**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	3	Date Reported:	12/20/2010
Sample ID:	East Wall	Date Sampled:	12/3/2010
Sample Matrix:	Soil	Date Analyzed:	12/3/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**76**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1437
Sample No.:	4	Date Reported:	12/20/2010
Sample ID:	South Wall	Date Sampled:	12/3/2010
Sample Matrix:	Soil	Date Analyzed:	12/3/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**80**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 29-7 #37 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Robyn S. Jones, EIT
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 3-Dec-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	246	261
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

Analyst

12/20/2010
Date

Robyn S. Jones, EIT
Print Name

Review

12/20/2010
Date

Toni McKnight, EIT
Print Name

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	Bottom	Date Reported:	09-28-10
Laboratory Number:	55957	Date Sampled:	09-24-10
Chain of Custody No:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Extracted:	09-24-10
Preservative:	Cool	Date Analyzed:	09-27-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**1,240**	**0.2**
Diesel Range (C10 - C28)	**26.2**	**0.1**
Total Petroleum Hydrocarbons	**1,270**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	Bench	Date Reported:	09-28-10
Laboratory Number:	55958	Date Sampled:	09-24-10
Chain of Custody No:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Extracted:	09-24-10
Preservative:	Cool	Date Analyzed:	09-27-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**3.7**	**0.2**
Diesel Range (C10 - C28)	**0.9**	**0.1**
Total Petroleum Hydrocarbons	**4.6**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	North Wall	Date Reported:	09-28-10
Laboratory Number:	55959	Date Sampled:	09-24-10
Chain of Custody No:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Extracted:	09-24-10
Preservative:	Cool	Date Analyzed:	09-27-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**34,200**	**0.2**
Diesel Range (C10 - C28)	**596**	**0.1**
Total Petroleum Hydrocarbons	**34,800**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	East Wall	Date Reported:	09-28-10
Laboratory Number:	55960	Date Sampled:	09-24-10
Chain of Custody No:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Extracted:	09-24-10
Preservative:	Cool	Date Analyzed:	09-27-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	09-27-10 QA/QC	Date Reported:	09-28-10
Laboratory Number:	55957	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	09-27-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	09-27-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	09-27-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	1,240	1,240	0.0%	0 - 30%
Diesel Range C10 - C28	26.2	26.4	0.1%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	1,240	250	1,470	98.7%	75 - 125%
Diesel Range C10 - C28	26.2	250	280	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 55940-55941, 55957-55962, 55965**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	Bottom	Date Reported:	09-28-10
Laboratory Number:	55957	Date Sampled:	09-24-10
Chain of Custody:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Analyzed:	09-27-10
Preservative:	Cool	Date Extracted:	09-24-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**155**	**0.9**
Toluene	**8,040**	**1.0**
Ethylbenzene	**2,780**	**1.0**
p,m-Xylene	**31,900**	**1.2**
o-Xylene	**7,240**	**0.9**
Total BTEX	**50,100**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**100 %**
	1,4-difluorobenzene	**97.0 %**
	Bromochlorobenzene	**104 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	Bench	Date Reported:	09-28-10
Laboratory Number:	55958	Date Sampled:	09-24-10
Chain of Custody:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Analyzed:	09-27-10
Preservative:	Cool	Date Extracted:	09-24-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**13.3**	**0.9**
Toluene	**10.6**	**1.0**
Ethylbenzene	**ND**	**1.0**
p,m-Xylene	**92.6**	**1.2**
o-Xylene	**72.5**	**0.9**
Total BTEX	**189**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**100 %**
	1,4-difluorobenzene	**96.5 %**
	Bromochlorobenzene	**105 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	North Wall	Date Reported:	09-28-10
Laboratory Number:	55959	Date Sampled:	09-24-10
Chain of Custody:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Analyzed:	09-27-10
Preservative:	Cool	Date Extracted:	09-24-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**15,900**	**0.9**
Toluene	**205,000**	**1.0**
Ethylbenzene	**5,240**	**1.0**
p,m-Xylene	**17,200**	**1.2**
o-Xylene	**22,600**	**0.9**
Total BTEX	**266,000**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**115 %**
	1,4-difluorobenzene	**125 %**
	Bromochlorobenzene	**114 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	East Wall	Date Reported:	09-28-10
Laboratory Number:	55960	Date Sampled:	09-24-10
Chain of Custody:	10401	Date Received:	09-24-10
Sample Matrix:	Soil	Date Analyzed:	09-27-10
Preservative:	Cool	Date Extracted:	09-24-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**ND**	**1.0**
Ethylbenzene	**ND**	**1.0**
p,m-Xylene	**ND**	**1.2**
o-Xylene	**ND**	**0.9**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**99.3 %**
	1,4-difluorobenzene	**96.2 %**
	Bromochlorobenzene	**99.3 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0927BBLK QA/QC	Date Reported:	09-28-10
Laboratory Number:	55957	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	09-27-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	6.1329E+005	6.1452E+005	0.2%	ND	0.1
Toluene	6.7571E+005	6.7706E+005	0.2%	ND	0.1
Ethylbenzene	6.1630E+005	6.1754E+005	0.2%	ND	0.1
p,m-Xylene	1.4869E+006	1.4898E+006	0.2%	ND	0.1
o-Xylene	5.5170E+005	5.5280E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	155	152	1.4%	0 - 30%	0.9
Toluene	8,040	8,030	0.1%	0 - 30%	1.0
Ethylbenzene	2,780	2,760	0.7%	0 - 30%	1.0
p,m-Xylene	31,900	32,000	0.3%	0 - 30%	1.2
o-Xylene	7,240	7,290	0.7%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	155	500	655	100%	39 - 150
Toluene	8,040	500	8,560	100%	46 - 148
Ethylbenzene	2,780	500	3,230	98.5%	32 - 160
p,m-Xylene	31,900	1000	32,700	99.4%	46 - 148
o-Xylene	7,240	500	7,760	100%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References:
Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 55940-55941, 55962, 55965, 55957-55960**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

10401

Client:	Project Name / Location:
ConocoPhillips	San Juan 29-7 #37 (nBS)
Client Address:	**Sampler Name:** S. Rowland
Client Phone No.:	**Client No.:** 92115-1437

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative: $HgCl_2$	Preservative: HCl	TPH (Method 8015) *	BTEX (Method 8021) *	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Bottom	9/24/10	11:15	55957	(Soil) Solid Sludge Aqueous	1/4 oz			X	X												X	X
Bench	↓	↓	55958	(Soil) Solid Sludge Aqueous	↓			X	X												X	X
North Wall			55959	(Soil) Solid Sludge Aqueous				X	X												X	X
East Wall			55960	(Soil) Solid Sludge Aqueous				X	X												X	X
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Sah Rowl	9/24/10	15:20		9/24/10	15:20
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

envirotech
Analytical Laboratory
5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	South Bottom	Date Reported:	11-11-10
Laboratory Number:	56448	Date Sampled:	11-10-10
Chain of Custody No:	10701	Date Received:	11-10-10
Sample Matrix:	Soil	Date Extracted:	11-10-10
Preservative:	Cool	Date Analyzed:	11-11-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**1,360**	**0.2**
Diesel Range (C10 - C28)	**82.3**	**0.1**
Total Petroleum Hydrocarbons	**1,440**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	North Bottom	Date Reported:	11-11-10
Laboratory Number:	56449	Date Sampled:	11-10-10
Chain of Custody No:	10701	Date Received:	11-10-10
Sample Matrix:	Soil	Date Extracted:	11-10-10
Preservative:	Cool	Date Analyzed:	11-11-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**29,000**	**0.2**
Diesel Range (C10 - C28)	**1,630**	**0.1**
Total Petroleum Hydrocarbons	**30,600**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-11-10 QA/QC	Date Reported:	11-11-10
Laboratory Number:	56446	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-11-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	11-11-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	11-11-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	252	101%	75 - 125%
Diesel Range C10 - C28	ND	250	252	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 56446-56452**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	South Bottom	Date Reported:	11-11-10
Laboratory Number:	56448	Date Sampled:	11-10-10
Chain of Custody:	10701	Date Received:	11-10-10
Sample Matrix:	Soil	Date Analyzed:	11-11-10
Preservative:	Cool	Date Extracted:	11-10-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**290**	**0.9**
Toluene	**7,800**	**1.0**
Ethylbenzene	**1,620**	**1.0**
p,m-Xylene	**22,200**	**1.2**
o-Xylene	**4,040**	**0.9**
Total BTEX	**35,900**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**109 %**
	1,4-difluorobenzene	**85.1 %**
	Bromochlorobenzene	**112 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	North Bottom	Date Reported:	11-11-10
Laboratory Number:	56449	Date Sampled:	11-10-10
Chain of Custody:	10701	Date Received:	11-10-10
Sample Matrix:	Soil	Date Analyzed:	11-11-10
Preservative:	Cool	Date Extracted:	11-10-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**12,600**	**0.9**
Toluene	**140,000**	**1.0**
Ethylbenzene	**3,480**	**1.0**
p,m-Xylene	**13,600**	**1.2**
o-Xylene	**23,200**	**0.9**
Total BTEX	**193,000**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**104 %**
	1,4-difluorobenzene	**97.4 %**
	Bromochlorobenzene	**114 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1111BBLK QA/QC	Date Reported:	11-11-10
Laboratory Number:	56446	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-11-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	5.7804E+005	5.7920E+005	0.2%	ND	0.1
Toluene	6.1537E+005	6.1661E+005	0.2%	ND	0.1
Ethylbenzene	5.5975E+005	5.6087E+005	0.2%	ND	0.1
p,m-Xylene	1.3109E+006	1.3135E+006	0.2%	ND	0.1
o-Xylene	5.1011E+005	5.1114E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	2.2	2.0	9.1%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	529	106%	39 - 150
Toluene	ND	500	561	112%	46 - 148
Ethylbenzene	ND	500	523	105%	32 - 160
p,m-Xylene	ND	1000	1,040	104%	46 - 148
o-Xylene	2.2	500	527	105%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 56446-56449

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

RUSH!

CHAIN OF CUSTODY RECORD

10701

Client: ConocoPhillips	Project Name / Location: San Juan 29-7 #37 (hBr)
Client Address:	Sampler Name: R. Jones / S. Rowland
Client Phone No.:	Client No.: 92115-1437

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
South Bottom	11/10/10	12:45	56448	(Soil) Solid Sludge Aqueous	1/4oz				X	X												X	X
North Bottom	11/10/10	13:10	56449	(Soil) Solid Sludge Aqueous	1/4oz				X	X												X	X
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/10/10	16:00	Randi Vaquera	11/10/10	16:00
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH Call Robyn w/ Results

envirotech Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	South Wall	Date Reported:	11-29-10
Laboratory Number:	56562	Date Sampled:	11-23-10
Chain of Custody No:	10812	Date Received:	11-24-10
Sample Matrix:	Soil	Date Extracted:	11-29-10
Preservative:	Cool	Date Analyzed:	11-29-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**462**	**0.2**
Diesel Range (C10 - C28)	**25.4**	**0.1**
Total Petroleum Hydrocarbons	**487**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **SJ 29-7 #37**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-29-10 QA/QC	Date Reported:	11-29-10
Laboratory Number:	56527	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-29-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	11-29-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	11-29-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	242	96.6%	75 - 125%
Diesel Range C10 - C28	ND	250	231	92.3%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 56527-56529, 56558, 56561-56563**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	South Wall	Date Reported:	11-29-10
Laboratory Number:	56562	Date Sampled:	11-23-10
Chain of Custody:	10812	Date Received:	11-24-10
Sample Matrix:	Soil	Date Analyzed:	11-29-10
Preservative:	Cool	Date Extracted:	11-29-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**5.0**	**0.9**
Toluene	**1,580**	**1.0**
Ethylbenzene	**1,020**	**1.0**
p,m-Xylene	**24,000**	**1.2**
o-Xylene	**4,900**	**0.9**
Total BTEX	**31,500**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**89.5 %**
	1,4-difluorobenzene	**88.7 %**
	Bromochlorobenzene	**110 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **S J 29-7 #37**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1129BBLK QA/QC	Date Reported:	11-29-10
Laboratory Number:	56560	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-29-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	3.3501E+005	3.3569E+005	0.2%	ND	0.1
Toluene	3.7994E+005	3.8070E+005	0.2%	ND	0.1
Ethylbenzene	3.4829E+005	3.4898E+005	0.2%	ND	0.1
p,m-Xylene	8.2477E+005	8.2643E+005	0.2%	ND	0.1
o-Xylene	2.9394E+005	2.9453E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	235	222	5.6%	0 - 30%	1.0
Ethylbenzene	71.9	70.5	1.9%	0 - 30%	1.0
p,m-Xylene	1,260	1,310	4.0%	0 - 30%	1.2
o-Xylene	336	344	2.3%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	591	118%	39 - 150
Toluene	235	500	703	95.6%	46 - 148
Ethylbenzene	71.9	500	650	114%	32 - 160
p,m-Xylene	1,260	1000	2,610	116%	46 - 148
o-Xylene	336	500	895	107%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 56560-56563, 56558**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

RUSH

CHAIN OF CUSTODY RECORD

10812

Client:	Project Name / Location:
ConocoPhillips	SJ 29-7 #37
Client Address:	Sampler Name: Scott G.
Client Phone No.:	Client No.: 92115-1437

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative Ice	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
South wall	11-23-10	16:00	56562	(Soil) Solid Sludge Aqueous	1-4oz			✓	✓	✓												Y	Y
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11-24-10	14:20	[signature]	11/24/10	14:20
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

envirotech
Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	Bottom (South Exc)	Date Reported:	12-06-10
Laboratory Number:	56621	Date Sampled:	12-03-10
Chain of Custody No:	10842	Date Received:	12-03-10
Sample Matrix:	Soil	Date Extracted:	12-06-10
Preservative:	Cool	Date Analyzed:	12-06-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**5,450**	**0.2**
Diesel Range (C10 - C28)	**79.4**	**0.1**
Total Petroleum Hydrocarbons	**5,530**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	12-06-10 QA/QC	Date Reported:	12-06-10
Laboratory Number:	56611	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-06-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	12-06-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	12-06-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	6,060	7,130	17.7%	0 - 30%
Diesel Range C10 - C28	340	363	6.7%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	6,060	250	6,200	98.3%	75 - 125%
Diesel Range C10 - C28	340	250	595	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 56611, 56616-56621, 56626-56627**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 · lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1437
Sample ID:	Bottom (South Exc)	Date Reported:	12-06-10
Laboratory Number:	56621	Date Sampled:	12-03-10
Chain of Custody:	10842	Date Received:	12-03-10
Sample Matrix:	Soil	Date Analyzed:	12-06-10
Preservative:	Cool	Date Extracted:	12-06-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**1,290**	**0.9**
Toluene	**65,000**	**1.0**
Ethylbenzene	**9,680**	**1.0**
p,m-Xylene	**81,800**	**1.2**
o-Xylene	**19,100**	**0.9**
Total BTEX	**177,000**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**89.9 %**
	1,4-difluorobenzene	**96.5 %**
	Bromochlorobenzene	**91.7 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **San Juan 29-7 #37 (hBr)**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1206BBLK QA/QC	Date Reported:	12-06-10
Laboratory Number:	56611	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-06-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	4.0728E+005	4.0809E+005	0.2%	ND	0.1
Toluene	4.7872E+005	4.7968E+005	0.2%	ND	0.1
Ethylbenzene	4.4726E+005	4.4816E+005	0.2%	ND	0.1
p,m-Xylene	1.0845E+006	1.0867E+006	0.2%	ND	0.1
o-Xylene	4.0927E+005	4.1010E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	692	720	4.1%	0 - 30%	0.9
Toluene	24,500	25,400	3.7%	0 - 30%	1.0
Ethylbenzene	7,830	8,200	4.7%	0 - 30%	1.0
p,m-Xylene	73,000	74,900	2.6%	0 - 30%	1.2
o-Xylene	18,900	19,700	4.2%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	692	500	1,150	96.5%	39 - 150
Toluene	24,500	500	27,200	109%	46 - 148
Ethylbenzene	7,830	500	9,430	113%	32 - 160
p,m-Xylene	73,000	1000	77,400	105%	46 - 148
o-Xylene	18,900	500	21,500	111%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 56611, 56616-56621, 56626**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

KUSH

CHAIN OF CUSTODY RECORD

10842

Client: ConocoPhillips	Project Name / Location: San Juan 29-7 #37 (hBr)
Client Address:	Sampler Name: R Jones — one not two TC per Robyn 12/7/10
Client Phone No.:	Client No.: 92115-1437

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Bottom (South End)	12/3/10	10:32	56021	(Soil) Solid Sludge Aqueous	1-4oz			Cool	X	X												Y	Y
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	12/3/10	16:30	[signature]	12/3/10	1630
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

envirotech
Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

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

Conoco Phillips

Certificate of Analysis Number:

11010416

Report To:		Project Name:	San Juan 29-7 Unit 37
Tetra Tech, Inc.		Site:	Albuquerque, NM
Cassandre Brown		Site Address:	
6121 Indian School Road, N.E.			
Suite 200		PO Number:	
Albuquerque		State:	New Mexico
NM		State Cert. No.:	
87110-		Date Reported:	1/19/2011
ph: (505) 237-8440 fax:			

This Report Contains A Total Of 30 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

1/19/2011

Date

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

Version 2.0 - Modified December 23, 2010

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

Case Narrative for:

Conoco Phillips

Certificate of Analysis Number:

11010416

Report To:		Project Name:	San Juan 29-7 Unit 37
Tetra Tech, Inc.		Site:	Albuquerque, NM
Cassandre Brown		Site Address:	
6121 Indian School Road, N.E.			
Suite 200		PO Number:	
Albuquerque		State:	New Mexico
NM		State Cert. No.:	
87110-			
ph: (505) 237-8440	fax:	Date Reported:	1/19/2011

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.

Plastic containers were received for DRO and PAH analyses for sample "B1 (WATER)". Per Elessa Sommers' phone conversation with Christine Matthews on January 17, 2011, both analyses were performed.

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.

SW8015B Diesel Range Organics:

For all soil samples in this report, the sample pattern did not resemble a diesel pattern.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted for Batch ID: 104503. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

SW8270C Semivolatiles Organics (PAH):

Due to limited sample volume (16 oz), the reported limits are elevated for the PAH analysis by Method 8270C.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted for Batch ID: 104506. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

SW8260B Volatile Organics:

For sample "B-1 (30-32)", SPL ID: 11010416-03, the benzene result is reported with a "J" flag. The result is estimated because the reading was below the reporting limit on the 50X dilution. Dilutions were performed on the sample because of high concentrations of target analytes.

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 ").

Erica Cardenas — 1/19/2011

Erica Cardenas
Project Manager

Date

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

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

Case Narrative for:

Conoco Phillips

Certificate of Analysis Number:

11010416

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.

1/19/2011

Erica Cardenas
Project Manager

Date

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

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

Conoco Phillips

Certificate of Analysis Number:

11010416

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

Fax To:

Project Name: San Juan 29-7 Unit 37
Site: Albuquerque, NM
Site Address:
PO Number:
State: New Mexico
State Cert. No.:
Date Reported: 1/19/2011

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
B-1 (66-68)	11010416-01	Soil	01/14/2011 12:15	1/15/2011 9:15:00 AM		☐
B-1 (68-70)	11010416-02	Soil	01/14/2011 12:30	1/15/2011 9:15:00 AM		☐
B-1 (30-32)	11010416-03	Soil	01/14/2011 13:00	1/15/2011 9:15:00 AM		☐
B-1 (86-88)	11010416-04	Soil	01/14/2011 13:50	1/15/2011 9:15:00 AM		☐
B-1 (88-90)	11010416-05	Soil	01/14/2011 13:20	1/15/2011 9:15:00 AM		☐
B-1 (92-94)	11010416-06	Soil	01/14/2011 13:40	1/15/2011 9:15:00 AM		☐
B-1 (122.5-123.5)	11010416-07	Soil	01/14/2011 10:00	1/15/2011 9:15:00 AM		☐
B-1 (WATER)	11010416-08	Water	01/14/2011 9:00	1/15/2011 9:15:00 AM		☐

Erica Cardenas
Project Manager

1/19/2011
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: B-1 (66-68) **Collected:** 01/14/2011 12:15 **SPL Sample ID:** 11010416-01

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				**MCL**	**SW8015B**	**Units: mg/kg**	
Diesel Range Organics (C10-C28)	11		5	1	01/17/11 14:14	NW	5702801
Surr: n-Pentacosane	59.0		% 20-154	1	01/17/11 14:14	NW	5702801

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/17/2011 9:53	A_G	1.00

GASOLINE RANGE ORGANICS				**MCL**	**SW8015B**	**Units: mg/kg**	
Gasoline Range Organics	14		2.5	25	01/17/11 21:40	WLV	5703145
Surr: 1,4-Difluorobenzene	104		% 63-142	25	01/17/11 21:40	WLV	5703145
Surr: 4-Bromofluorobenzene	130		% 50-159	25	01/17/11 21:40	WLV	5703145

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/17/2011 13:55	XML	1.00

VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**	**Units: ug/kg**	
Benzene	ND		6.4	1	01/17/11 17:41	TLE	5702820
Ethylbenzene	82		6.4	1	01/17/11 17:41	TLE	5702820
Toluene	110		6.4	1	01/17/11 17:41	TLE	5702820
m,p-Xylene	1500		290	50	01/17/11 17:00	LU_L	5703069
o-Xylene	380		290	50	01/17/11 17:00	LU_L	5703069
Xylenes,Total	1880		291	50	01/17/11 17:00	LU_L	5703069
Surr: 1,2-Dichloroethane-d4	93.5		% 78-116	50	01/17/11 17:00	LU_L	5703069
Surr: 1,2-Dichloroethane-d4	91.1		% 71-130	1	01/17/11 17:41	TLE	5702820
Surr: 4-Bromofluorobenzene	102		% 74-125	50	01/17/11 17:00	LU_L	5703069
Surr: 4-Bromofluorobenzene	97.7		% 65-131	1	01/17/11 17:41	TLE	5702820
Surr: Toluene-d8	98.3		% 82-118	50	01/17/11 17:00	LU_L	5703069
Surr: Toluene-d8	98.7		% 75-136	1	01/17/11 17:41	TLE	5702820

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5035A	01/14/2011 12:15	Field	1.28
SW5035A	01/14/2011 12:15	Field	1.16

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (68-70) **Collected:** 01/14/2011 12:30 **SPL Sample ID:** 11010416-02

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**SW8015B**	**Units: mg/kg**		
Diesel Range Organics (C10-C28)	12		5	1	01/17/11 15:14	NW	5702804
Surr: n-Pentacosane	73.8		% 20-154	1	01/17/11 15:14	NW	5702804

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/17/2011 9:53	A_G	1.00

GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/kg		
Gasoline Range Organics	0.35		0.1	1	01/18/11 2:07	WLV	5703136
Surr: 1,4-Difluorobenzene	98.3		% 63-142	1	01/18/11 2:07	WLV	5703136
Surr: 4-Bromofluorobenzene	120		% 50-159	1	01/18/11 2:07	WLV	5703136

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/17/2011 13:57	XML	1.00

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/kg		
Benzene	ND		5.8	1	01/17/11 18:24	TLE	5702821
Ethylbenzene	ND		5.8	1	01/17/11 18:24	TLE	5702821
Toluene	14		5.8	1	01/17/11 18:24	TLE	5702821
m,p-Xylene	69		5.8	1	01/17/11 18:24	TLE	5702821
o-Xylene	20		5.8	1	01/17/11 18:24	TLE	5702821
Xylenes,Total	89		5.8	1	01/17/11 18:24	TLE	5702821
Surr: 1,2-Dichloroethane-d4	91.1		% 71-130	1	01/17/11 18:24	TLE	5702821
Surr: 4-Bromofluorobenzene	92.8		% 65-131	1	01/17/11 18:24	TLE	5702821
Surr: Toluene-d8	95.4		% 75-136	1	01/17/11 18:24	TLE	5702821

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5035A	01/14/2011 12:30	Field	1.16

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (30-32) **Collected:** 01/14/2011 13:00 **SPL Sample ID:** 11010416-03

Site: Albuquerque, NM

Analyses/Method	Result	QUAL		Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS					**MCL**	**SW8015B**	**Units: mg/kg**	
Diesel Range Organics (C10-C28)	380			50	10	01/17/11 17:55	NW	5702811
Surr: n-Pentacosane	115		%	20-154	10	01/17/11 17:55	NW	5702811

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/17/2011 9:53	A_G	1.00

GASOLINE RANGE ORGANICS					**MCL**	**SW8015B**	**Units: mg/kg**	
Gasoline Range Organics	5300			100	1000	01/18/11 10:23	WLV	5703142
Surr: 1,4-Difluorobenzene	113		%	63-142	1000	01/18/11 10:23	WLV	5703142
Surr: 4-Bromofluorobenzene	277MI	*	%	50-159	1000	01/18/11 10:23	WLV	5703142

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/17/2011 13:59	XML	1.00

VOLATILE ORGANICS BY METHOD 8260B					**MCL**	**SW8260B**	**Units: ug/kg**	
Benzene	250 J			290	50	01/17/11 18:50	LU_L	5703071
Ethylbenzene	11000			290	50	01/17/11 18:50	LU_L	5703071
Toluene	48000			5800	1000	01/18/11 12:25	LU_L	5703255
m,p-Xylene	310000			5800	1000	01/18/11 12:25	LU_L	5703255
o-Xylene	64000			5800	1000	01/18/11 12:25	LU_L	5703255
Xylenes,Total	374000			5820	1000	01/18/11 12:25	LU_L	5703255
Surr: 1,2-Dichloroethane-d4	89.4		%	78-116	1000	01/18/11 12:25	LU_L	5703255
Surr: 1,2-Dichloroethane-d4	90.7		%	78-116	50	01/17/11 18:50	LU_L	5703071
Surr: 4-Bromofluorobenzene	102		%	74-125	1000	01/18/11 12:25	LU_L	5703255
Surr: 4-Bromofluorobenzene	84.8		%	74-125	50	01/17/11 18:50	LU_L	5703071
Surr: Toluene-d8	99.9		%	82-118	1000	01/18/11 12:25	LU_L	5703255
Surr: Toluene-d8	109		%	82-118	50	01/17/11 18:50	LU_L	5703071

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5035A	01/14/2011 13:00	Field	1.16

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (86-88) **Collected:** 01/14/2011 13:50 **SPL Sample ID:** 11010416-04

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**SW8015B**	**Units: mg/kg**		
Diesel Range Organics (C10-C28)	ND		5	1	01/17/11 15:34	NW	5702805
Surr: n-Pentacosane	97.8		% 20-154	1	01/17/11 15:34	NW	5702805

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/17/2011 9:53	A_G	1.00

GASOLINE RANGE ORGANICS			**MCL**	**SW8015B**	**Units: mg/kg**		
Gasoline Range Organics	ND		0.1	1	01/17/11 23:14	WLV	5703130
Surr: 1,4-Difluorobenzene	98.6		% 63-142	1	01/17/11 23:14	WLV	5703130
Surr: 4-Bromofluorobenzene	99.8		% 50-159	1	01/17/11 23:14	WLV	5703130

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/17/2011 14:09	XML	1.00

VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/kg**		
Benzene	ND		5.4	1	01/17/11 16:16	TLE	5702816
Ethylbenzene	ND		5.4	1	01/17/11 16:16	TLE	5702816
Toluene	ND		5.4	1	01/17/11 16:16	TLE	5702816
m,p-Xylene	ND		5.4	1	01/17/11 16:16	TLE	5702816
o-Xylene	ND		5.4	1	01/17/11 16:16	TLE	5702816
Xylenes,Total	ND		5.4	1	01/17/11 16:16	TLE	5702816
Surr: 1,2-Dichloroethane-d4	89.7		% 71-130	1	01/17/11 16:16	TLE	5702816
Surr: 4-Bromofluorobenzene	89.2		% 65-131	1	01/17/11 16:16	TLE	5702816
Surr: Toluene-d8	97.0		% 75-136	1	01/17/11 16:16	TLE	5702816

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5035A	01/14/2011 13:50	Field	1.09

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (88-90) **Collected:** 01/14/2011 13:20 **SPL Sample ID:** 11010416-05

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: mg/kg		
Diesel Range Organics (C10-C28)	ND		5	1	01/17/11 15:55	NW	5702806
Surr: n-Pentacosane	104		% 20-154	1	01/17/11 15:55	NW	5702806

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/17/2011 9:53	A_G	1.00

GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/kg		
Gasoline Range Organics	ND		0.1	1	01/18/11 0:41	WLV	5703133
Surr: 1,4-Difluorobenzene	101		% 63-142	1	01/18/11 0:41	WLV	5703133
Surr: 4-Bromofluorobenzene	96.4		% 50-159	1	01/18/11 0:41	WLV	5703133

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/17/2011 14:12	XML	1.00

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/kg		
Benzene	ND		5.1	1	01/17/11 16:37	TLE	5702817
Ethylbenzene	ND		5.1	1	01/17/11 16:37	TLE	5702817
Toluene	ND		5.1	1	01/17/11 16:37	TLE	5702817
m,p-Xylene	17		5.1	1	01/17/11 16:37	TLE	5702817
o-Xylene	ND		5.1	1	01/17/11 16:37	TLE	5702817
Xylenes,Total	17		5.1	1	01/17/11 16:37	TLE	5702817
Surr: 1,2-Dichloroethane-d4	93.5		% 71-130	1	01/17/11 16:37	TLE	5702817
Surr: 4-Bromofluorobenzene	91.7		% 65-131	1	01/17/11 16:37	TLE	5702817
Surr: Toluene-d8	94.2		% 75-136	1	01/17/11 16:37	TLE	5702817

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5035A	01/14/2011 13:20	Field	1.02

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (92-94) **Collected:** 01/14/2011 13:40 **SPL Sample ID:** 11010416-06

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				**MCL**	**SW8015B**	**Units: mg/kg**	
Diesel Range Organics (C10-C28)	ND		5	1	01/17/11 17:35	NW	5702810
Surr: n-Pentacosane	76.7		% 20-154	1	01/17/11 17:35	NW	5702810

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/17/2011 9:53	A_G	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/kg	
Gasoline Range Organics	0.14		0.1	1	01/18/11 3:05	WLV	5703137
Surr: 1,4-Difluorobenzene	98.7		% 63-142	1	01/18/11 3:05	WLV	5703137
Surr: 4-Bromofluorobenzene	101		% 50-159	1	01/18/11 3:05	WLV	5703137

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/17/2011 14:14	XML	1.00

VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/kg	
Benzene	ND		5.6	1	01/17/11 16:58	TLE	5702818
Ethylbenzene	ND		5.6	1	01/17/11 16:58	TLE	5702818
Toluene	6		5.6	1	01/17/11 16:58	TLE	5702818
m,p-Xylene	17		5.6	1	01/17/11 16:58	TLE	5702818
o-Xylene	ND		5.6	1	01/17/11 16:58	TLE	5702818
Xylenes,Total	17		5.56	1	01/17/11 16:58	TLE	5702818
Surr: 1,2-Dichloroethane-d4	88.4		% 71-130	1	01/17/11 16:58	TLE	5702818
Surr: 4-Bromofluorobenzene	90.6		% 65-131	1	01/17/11 16:58	TLE	5702818
Surr: Toluene-d8	96.8		% 75-136	1	01/17/11 16:58	TLE	5702818

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5035A	01/14/2011 13:40	Field	1.11

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (122.5-123.5) **Collected:** 01/14/2011 10:00 **SPL Sample ID:** 11010416-07

Site: Albuquerque, NM

Analyses/Method	Result	QUAL		Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS					**MCL**	**SW8015B**	**Units: mg/kg**	
Diesel Range Organics (C10-C28)	ND			5	1	01/17/11 16:15	NW	5702807
Surr: n-Pentacosane	93.5		%	20-154	1	01/17/11 16:15	NW	5702807

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/17/2011 9:53	A_G	1.00

GASOLINE RANGE ORGANICS					**MCL**	**SW8015B**	**Units: mg/kg**	
Gasoline Range Organics	0.11			0.1	1	01/18/11 3:33	WLV	5703138
Surr: 1,4-Difluorobenzene	102		%	63-142	1	01/18/11 3:33	WLV	5703138
Surr: 4-Bromofluorobenzene	97.2		%	50-159	1	01/18/11 3:33	WLV	5703138

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/17/2011 14:15	XML	1.00

VOLATILE ORGANICS BY METHOD 8260B					**MCL**	**SW8260B**	**Units: ug/kg**	
Benzene	ND			5	1	01/17/11 17:20	TLE	5702819
Ethylbenzene	22			5	1	01/17/11 17:20	TLE	5702819
Toluene	96			5	1	01/17/11 17:20	TLE	5702819
m,p-Xylene	300			5	1	01/17/11 17:20	TLE	5702819
o-Xylene	47			5	1	01/17/11 17:20	TLE	5702819
Xylenes,Total	347			5	1	01/17/11 17:20	TLE	5702819
Surr: 1,2-Dichloroethane-d4	91.5		%	71-130	1	01/17/11 17:20	TLE	5702819
Surr: 4-Bromofluorobenzene	95.7		%	65-131	1	01/17/11 17:20	TLE	5702819
Surr: Toluene-d8	98.5		%	75-136	1	01/17/11 17:20	TLE	5702819

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5035A	01/14/2011 10:00	Field	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (WATER) **Collected:** 01/14/2011 9:00 **SPL Sample ID:** 11010416-08

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**SW8015B**	**Units: mg/L**		
Diesel Range Organics (C10-C28)	1.4		0.11	1	01/17/11 20:16	NW	5703261
Surr: n-Pentacosane	82.6		% 20-150	1	01/17/11 20:16	NW	5703261

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	01/17/2011 14:07	MB1	1.05

GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Gasoline Range Organics	73		10	100	01/17/11 13:54	NMa	5703270
Surr: 1,4-Difluorobenzene	105		% 60-155	100	01/17/11 13:54	NMa	5703270
Surr: 4-Bromofluorobenzene	107		% 50-158	100	01/17/11 13:54	NMa	5703270

SEMIVOLATILES ORGANICS BY METHOD 8270C			MCL	SW8270C	Units: ug/L		
1-Methylnaphthalene	ND		10	1	01/17/11 22:18	S_G	5703109
2-Methylnaphthalene	ND		10	1	01/17/11 22:18	S_G	5703109
Acenaphthene	ND		10	1	01/17/11 22:18	S_G	5703109
Acenaphthylene	ND		10	1	01/17/11 22:18	S_G	5703109
Anthracene	ND		10	1	01/17/11 22:18	S_G	5703109
Benz(a)anthracene	ND		10	1	01/17/11 22:18	S_G	5703109
Benzo(a)pyrene	ND		10	1	01/17/11 22:18	S_G	5703109
Benzo(b)fluoranthene	ND		10	1	01/17/11 22:18	S_G	5703109
Benzo(g,h,i)perylene	ND		10	1	01/17/11 22:18	S_G	5703109
Benzo(k)fluoranthene	ND		10	1	01/17/11 22:18	S_G	5703109
Chrysene	ND		10	1	01/17/11 22:18	S_G	5703109
Dibenz(a,h)anthracene	ND		10	1	01/17/11 22:18	S_G	5703109
Dibenzofuran	ND		10	1	01/17/11 22:18	S_G	5703109
Fluoranthene	ND		10	1	01/17/11 22:18	S_G	5703109
Fluorene	ND		10	1	01/17/11 22:18	S_G	5703109
Indeno(1,2,3-cd)pyrene	ND		10	1	01/17/11 22:18	S_G	5703109
Naphthalene	ND		10	1	01/17/11 22:18	S_G	5703109
Phenanthrene	ND		10	1	01/17/11 22:18	S_G	5703109
Pyrene	ND		10	1	01/17/11 22:18	S_G	5703109
Surr: 2-Fluorobiphenyl	75.0		% 45-108	1	01/17/11 22:18	S_G	5703109
Surr: Nitrobenzene-d5	74.0		% 41-113	1	01/17/11 22:18	S_G	5703109
Surr: Terphenyl-d14	84.5		% 43-122	1	01/17/11 22:18	S_G	5703109

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	01/17/2011 15:28	MB1	2.04

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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: B-1 (WATER) **Collected:** 01/14/2011 9:00 **SPL Sample ID:** 11010416-08

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**	**Units: ug/L**		
Benzene	930		10	10		01/17/11 16:38	LT	5702648
Ethylbenzene	1400		10	10		01/17/11 16:38	LT	5702648
Toluene	15000		100	100		01/17/11 17:31	LT	5702650
m,p-Xylene	16000		200	100		01/17/11 17:31	LT	5702650
o-Xylene	2800		100	100		01/17/11 17:31	LT	5702650
Xylenes,Total	18800		100	100		01/17/11 17:31	LT	5702650
Surr: 1,2-Dichloroethane-d4	83.0		% 70-130	10		01/17/11 16:38	LT	5702648
Surr: 1,2-Dichloroethane-d4	81.8		% 70-130	100		01/17/11 17:31	LT	5702650
Surr: 4-Bromofluorobenzene	129 MI	*	% 74-125	10		01/17/11 16:38	LT	5702648
Surr: 4-Bromofluorobenzene	118		% 74-125	100		01/17/11 17:31	LT	5702650
Surr: Toluene-d8	110		% 82-118	10		01/17/11 16:38	LT	5702648
Surr: Toluene-d8	103		% 82-118	100		01/17/11 17:31	LT	5702650

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
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

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 11010416
Lab Batch ID: 104488

Method Blank

RunID: HP_V_110117A-5702800 Units: mg/kg
Analysis Date: 01/17/2011 13:54 Analyst: NW
Preparation Date: 01/17/2011 9:53 Prep By: A_G Method: SW3510C

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	5.0
Surr: n-Pentacosane	71.7	20-154

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-01B	B-1 (66-68)
11010416-02B	B-1 (68-70)
11010416-03B	B-1 (30-32)
11010416-04B	B-1 (86-88)
11010416-05B	B-1 (88-90)
11010416-06B	B-1 (92-94)
11010416-07B	B-1 (122.5-123.5)

Laboratory Control Sample (LCS)

RunID: HP_V_110117A-5702799 Units: mg/kg
Analysis Date: 01/17/2011 13:14 Analyst: NW
Preparation Date: 01/17/2011 9:53 Prep By: A_G Method: SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	33.3	28.5	85.7	57	150
Surr: n-Pentacosane	1.66	1.35	81.4	20	154

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

Sample Spiked: 11010416-01
RunID: HP_V_110117A-5702802 Units: mg/kg
Analysis Date: 01/17/2011 14:34 Analyst: NW
Preparation Date: 01/17/2011 9:53 Prep By: A_G Method: SW3550B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	10.8	33.3	37.4	79.9	33.3	35.8	74.9	4.49	50	21	175
Surr: n-Pentacosane	ND	1.66	1.26	76.2	1.66	1.23	74.1	2.81	30	20	154

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

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

1/19/2011 6:30:21 PM

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 11010416
Lab Batch ID: 104503

Method Blank

RunID: HP_V_110117C-5703258 Units: mg/L
Analysis Date: 01/17/2011 19:16 Analyst: NW
Preparation Date: 01/17/2011 14:07 Prep By: MB1 Method: SW3510C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-08C	B-1 (WATER)

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	0.10
Surr: n-Pentacosane	90.4	20-150

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

RunID: HP_V_110117C-5703259 Units: mg/L
Analysis Date: 01/17/2011 19:36 Analyst: NW
Preparation Date: 01/17/2011 14:07 Prep By: MB1 Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	1.00	0.873	87.3	1.00	0.869	86.9	0.4	39	21	130
Surr: n-Pentacosane	0.0500	0.0460	92.0	0.0500	0.0465	93.0	1.1	30	20	150

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

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

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Gasoline Range Organics
Method: SW8015B
WorkOrder: 11010416
Lab Batch ID: R314515

Method Blank

RunID: HP_O_110117A-5703127 Units: mg/kg
Analysis Date: 01/17/2011 20:43 Analyst: WLV
Preparation Date: 01/17/2011 20:43 Prep By: Method: SW5030B

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	100.0	63-142
Surr: 4-Bromofluorobenzene	102.8	50-159

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-01C	B-1 (66-68)
11010416-02C	B-1 (68-70)
11010416-03C	B-1 (30-32)
11010416-04C	B-1 (86-88)
11010416-05C	B-1 (88-90)
11010416-06C	B-1 (92-94)
11010416-07C	B-1 (122.5-123.5)

Methanolic Preparation Blank

RunID: HP_O_110117A-5703128 Units: mg/kg
Analysis Date: 01/17/2011 21:11 Analyst: WLV
Preparation Date: 01/17/2011 21:11 Prep By: Method: SW5030B

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	2.5
Surr: 1,4-Difluorobenzene	100.0	63-142
Surr: 4-Bromofluorobenzene	99.5	50-159

Laboratory Control Sample (LCS)

RunID: HP_O_110117A-5703141 Units: mg/kg
Analysis Date: 01/18/2011 9:47 Analyst: WLV
Preparation Date: 01/18/2011 9:47 Prep By: Method: SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	1.03	103	70	130
Surr: 1,4-Difluorobenzene	0.100	0.109	109	63	142
Surr: 4-Bromofluorobenzene	0.100	0.113	113	50	159

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

Sample Spiked: 11010416-04
RunID: HP_O_110117A-5703131 Units: mg/kg
Analysis Date: 01/17/2011 23:43 Analyst: WLV
Preparation Date: 01/17/2011 14:10 Prep By: XML Method: SW5030B

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Gasoline Range Organics
Method: SW8015B
WorkOrder: 11010416
Lab Batch ID: R314515

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	1.12	108	1	1.13	109	0.791	50	26	147
Surr: 1,4-Difluorobenzene	ND	0.1	0.104	104	0.1	0.105	105	0.383	30	63	142
Surr: 4-Bromofluorobenzene	ND	0.1	0.108	108	0.1	0.108	108	0.555	30	50	159

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Gasoline Range Organics
Method: SW8015B
WorkOrder: 11010416
Lab Batch ID: R314525

Method Blank

RunID: HP_J_110117A-5703266 Units: mg/L
Analysis Date: 01/17/2011 11:07 Analyst: NMa

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-08B	B-1 (WATER)

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	100.3	60-155
Surr: 4-Bromofluorobenzene	97.7	50-158

Laboratory Control Sample (LCS)

RunID: HP_J_110117A-5703265 Units: mg/L
Analysis Date: 01/17/2011 10:39 Analyst: NMa

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.973	97.3	42	136
Surr: 1,4-Difluorobenzene	0.100	0.107	107	60	155
Surr: 4-Bromofluorobenzene	0.100	0.103	103	50	158

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

Sample Spiked: 11010299-01
RunID: HP_J_110117A-5703268 Units: mg/L
Analysis Date: 01/17/2011 12:56 Analyst: NMa

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	5.26	25	27.9	90.4	25	29.2	95.6	4.57	36	22	174
Surr: 1,4-Difluorobenzene	ND	2.5	2.68	107	2.5	2.72	109	1.56	30	60	155
Surr: 4-Bromofluorobenzene	ND	2.5	2.57	103	2.5	2.63	105	2.20	30	50	158

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Semivolatiles Organics by Method 8270C
Method: SW8270C
WorkOrder: 11010416
Lab Batch ID: 104506

Method Blank

RunID: J_110117B-5703108 Units: ug/L
Analysis Date: 01/17/2011 21:44 Analyst: S_G
Preparation Date: 01/17/2011 15:28 Prep By: MB1 Method: SW3510C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-08D	B-1 (WATER)

Analyte	Result	Rep Limit
1-Methylnaphthalene	ND	5.0
2-Methylnaphthalene	ND	5.0
Acenaphthene	ND	5.0
Acenaphthylene	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
Chrysene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Dibenzofuran	ND	5.0
Fluoranthene	ND	5.0
Fluorene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Naphthalene	ND	5.0
Phenanthrene	ND	5.0
Pyrene	ND	5.0
Surr: 2-Fluorobiphenyl	83.2	45-108
Surr: Nitrobenzene-d5	80.6	41-113
Surr: Terphenyl-d14	98.0	43-122

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

RunID: J_110117B-5703106 Units: ug/L
Analysis Date: 01/17/2011 20:35 Analyst: S_G
Preparation Date: 01/17/2011 15:28 Prep By: MB1 Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
1-Methylnaphthalene	50.0	40.2	80.4	50.0	40.5	81.0	0.7	30	52	109
2-Methylnaphthalene	50.0	42.4	84.8	50.0	43.0	86.0	1.4	30	52	116
Acenaphthene	50.0	42.4	84.8	50.0	42.6	85.2	0.5	30	52	117
Acenaphthylene	50.0	42.3	84.6	50.0	42.2	84.4	0.2	30	53	122
Anthracene	50.0	41.5	83.0	50.0	41.1	82.2	1.0	30	49	126
Benz(a)anthracene	50.0	43.6	87.2	50.0	43.1	86.2	1.2	30	53	121

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Semivolatiles Organics by Method 8270C **WorkOrder:** 11010416
Method: SW8270C **Lab Batch ID:** 104506

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

RunID: J_110117B-5703106 Units: ug/L
Analysis Date: 01/17/2011 20:35 Analyst: S_G
Preparation Date: 01/17/2011 15:28 Prep By: MB1 Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Benzo(a)pyrene	50.0	41.9	83.8	50.0	40.9	81.8	2.4	30	47	100
Benzo(b)fluoranthene	50.0	41.3	82.6	50.0	39.6	79.2	4.2	30	52	113
Benzo(g,h,i)perylene	50.0	43.1	86.2	50.0	42.4	84.8	1.6	30	52	121
Benzo(k)fluoranthene	50.0	39.1	78.2	50.0	38.9	77.8	0.5	30	54	117
Chrysene	50.0	42.8	85.6	50.0	42.7	85.4	0.2	30	53	117
Dibenz(a,h)anthracene	50.0	41.4	82.8	50.0	41.1	82.2	0.7	30	49	120
Dibenzofuran	50.0	42.9	85.8	50.0	43.1	86.2	0.5	30	55	119
Fluoranthene	50.0	42.5	85.0	50.0	42.2	84.4	0.7	30	49	132
Fluorene	50.0	43.2	86.4	50.0	42.7	85.4	1.2	30	54	119
Indeno(1,2,3-cd)pyrene	50.0	43.6	87.2	50.0	43.9	87.8	0.7	30	50	129
Naphthalene	50.0	39.8	79.6	50.0	40.0	80.0	0.5	30	53	111
Phenanthrene	50.0	44.8	89.6	50.0	45.1	90.2	0.7	30	49	124
Pyrene	50.0	46.0	92.0	50.0	45.9	91.8	0.2	30	52	122
Surr: 2-Fluorobiphenyl	50.0	43.1	86.2	50.0	43.1	86.2	0.0	30	45	108
Surr: Nitrobenzene-d5	50.0	41.1	82.2	50.0	41.0	82.0	0.2	30	41	113
Surr: Terphenyl-d14	50.0	47.6	95.2	50.0	46.9	93.8	1.5	30	43	122

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 11010416
Lab Batch ID: R314431

Method Blank

RunID: M_110117A-5702386 Units: ug/kg
Analysis Date: 01/17/2011 11:59 Analyst: TLE

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	94.3	71-130
Surr: 4-Bromofluorobenzene	86.6	65-131
Surr: Toluene-d8	94.7	75-136

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-01A	B-1 (66-68)
11010416-02A	B-1 (68-70)
11010416-04A	B-1 (86-88)
11010416-05A	B-1 (88-90)
11010416-06A	B-1 (92-94)
11010416-07A	B-1 (122.5-123.5)

Laboratory Control Sample (LCS)

RunID: M_110117A-5701939 Units: ug/kg
Analysis Date: 01/17/2011 10:55 Analyst: TLE

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	17.6	87.9	64	130
Ethylbenzene	20.0	17.9	89.4	58	143
Toluene	20.0	16.9	84.7	63	139
m,p-Xylene	40.0	36.3	90.6	64	137
o-Xylene	20.0	18.3	91.6	64	143
Xylenes,Total	60.0	54.6	91.0	64	143
Surr: 1,2-Dichloroethane-d4	50.0	47.2	94.4	71	130
Surr: 4-Bromofluorobenzene	50.0	47.6	95.3	65	131
Surr: Toluene-d8	50.0	46.4	92.9	75	136

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

Sample Spiked: H1101023900
RunID: M_110117A-5702434 Units: ug/kg
Analysis Date: 01/17/2011 14:08 Analyst: TLE

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 11010416
Method: SW8260B **Lab Batch ID:** R314431

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	18.5	90.0	20	18.7	91.5	1.54	21	49	135
Ethylbenzene	ND	20	19.2	94.9	20	18.6	91.8	3.26	30	39	135
Toluene	ND	20	17.8	86.6	20	17.3	84.4	2.49	21	49	133
m,p-Xylene	ND	40	41.9	98.6	40	39.0	91.4	7.12	30	32	140
o-Xylene	ND	20	21.8	99.1	20	19.8	89.4	9.34	30	36	142
Xylenes,Total	ND	60	63.7	98.8	60	58.8	90.7	7.87	30	32	142
Surr: 1,2-Dichloroethane-d4	ND	50	45.6	91.2	50	46.0	92.0	0.916	30	71	130
Surr: 4-Bromofluorobenzene	ND	50	48.3	96.6	50	48.4	96.9	0.240	30	65	131
Surr: Toluene-d8	ND	50	46.2	92.5	50	46.0	92.1	0.447	30	75	136

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

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

1/19/2011 6:30:23 PM

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 11010416
Lab Batch ID: R314436

Method Blank

RunID: MSDVOA3_110117A-5702533 Units: ug/L
Analysis Date: 01/17/2011 11:43 Analyst: LT

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-08A	B-1 (WATER)

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	ND	1.0
Toluene	ND	1.0
m,p-Xylene	ND	2.0
o-Xylene	ND	1.0
Xylenes,Total	ND	1.0
Surr: 1,2-Dichloroethane-d4	80.4	70-130
Surr: 4-Bromofluorobenzene	110.1	74-125
Surr: Toluene-d8	107.8	82-118

Laboratory Control Sample (LCS)

RunID: MSDVOA3_110117A-57025 Units: ug/L
Analysis Date: 01/17/2011 10:45 Analyst: LT

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	22.6	113	74	123
Ethylbenzene	20.0	19.3	96.6	72	127
Toluene	20.0	20.2	101	74	126
m,p-Xylene	40.0	38.9	97.3	71	129
o-Xylene	20.0	19.1	95.7	74	130
Xylenes,Total	60	58	97	71	130
Surr: 1,2-Dichloroethane-d4	50.0	40.1	80.1	70	130
Surr: 4-Bromofluorobenzene	50.0	59.2	118	74	125
Surr: Toluene-d8	50.0	51.8	104	82	118

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

Sample Spiked: 11010309-02
RunID: MSDVOA3_110117A-57026 Units: mg/L
Analysis Date: 01/17/2011 15:45 Analyst: LT

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 11010416
Lab Batch ID: R314436

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	0.02	0.0213	106	0.02	0.0208	104	2.37	22	70	124
Ethylbenzene	ND	0.02	0.0185	92.7	0.02	0.0177	88.3	4.87	20	76	122
Toluene	ND	0.02	0.0189	94.5	0.02	0.0182	91.2	3.60	24	80	117
m,p-Xylene	ND	0.04	0.0366	91.5	0.04	0.0350	87.4	4.64	20	69	127
o-Xylene	ND	0.02	0.0183	91.6	0.02	0.0175	87.7	4.42	20	84	114
Xylenes,Total	ND	0.06	0.0549	91.6	0.06	0.0525	87.5	4.56	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	41.4	82.8	50	41.5	83.1	0.361	30	70	130
Surr: 4-Bromofluorobenzene	ND	50	59.8	120	50	59.8	120	0.0174	30	74	125
Surr: Toluene-d8	ND	50	50.6	101	50	50.3	101	0.699	30	82	118

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 11010416
Lab Batch ID: R314510

Method Blank

RunID: K_110117D-5703064 Units: ug/kg
Analysis Date: 01/17/2011 11:38 Analyst: LU_L

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-01A	B-1 (66-68)
11010416-03A	B-1 (30-32)

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	95.1	71-130
Surr: 4-Bromofluorobenzene	102.5	65-131
Surr: Toluene-d8	99.2	75-136

Methanolic Preparation Blank

RunID: K_110117D-5703065 Units: ug/kg
Analysis Date: 01/17/2011 12:04 Analyst: LU_L

Analyte	Result	Rep Limit
Benzene	ND	250
Ethylbenzene	ND	250
m,p-Xylene	ND	250
o-Xylene	ND	250
Xylenes,Total	ND	250
Surr: 1,2-Dichloroethane-d4	93.3	78-116
Surr: 4-Bromofluorobenzene	103.4	74-125
Surr: Toluene-d8	100.2	82-118

Laboratory Control Sample (LCS)

RunID: K_110117D-5703063 Units: ug/kg
Analysis Date: 01/17/2011 11:12 Analyst: LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.4	97.1	74	123
Ethylbenzene	20.0	20.1	101	72	127
m,p-Xylene	40.0	40.2	101	71	129
o-Xylene	20.0	19.9	99.4	74	130

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 11010416
Method: SW8260B **Lab Batch ID:** R314510

Laboratory Control Sample (LCS)

RunID: K_110117D-5703063 Units: ug/kg
Analysis Date: 01/17/2011 11:12 Analyst: LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Xylenes,Total	60.0	60.1	100	71	130
Surr: 1,2-Dichloroethane-d4	50.0	47.2	94.3	78	116
Surr: 4-Bromofluorobenzene	50.0	50.3	101	74	125
Surr: Toluene-d8	50.0	48.5	97.1	82	118

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

Sample Spiked: H1101012900
RunID: K_110117D-5703067 Units: ug/kg
Analysis Date: 01/17/2011 15:40 Analyst: LU_L

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	1370000	1E+06	2330000	96.7	1E+06	2330000	96.3	0.181	22	70	124
Ethylbenzene	8790000	1E+06	9330000	N/C	1E+06	9490000	N/C	N/C	20	76	122
m,p-Xylene	5810000	2E+06	7420000	80.4	2E+06	7630000	90.9	2.80	20	69	127
o-Xylene	ND	1E+06	1070000	107	1E+06	1030000	103	3.54	20	84	114
Xylenes,Total	5810000	3E+06	8490000	89.1	3E+06	8660000	94.9	2.03	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	3E+06	2300000	91.9	3E+06	2290000	91.6	0.311	30	78	116
Surr: 4-Bromofluorobenzene	ND	3E+06	2690000	108	3E+06	2660000	106	1.22	30	74	125
Surr: Toluene-d8	ND	3E+06	2480000	99.1	3E+06	2500000	100	1.11	30	82	118

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 11010416
Method: SW8260B **Lab Batch ID:** R314523

Method Blank

RunID: K_110118A-5703253 Units: ug/kg
Analysis Date: 01/18/2011 11:33 Analyst: LU_L

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
11010416-03A	B-1 (30-32)

Analyte	Result	Rep Limit
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	93.2	71-130
Surr: 4-Bromofluorobenzene	101.3	65-131
Surr: Toluene-d8	96.7	75-136

Methanolic Preparation Blank

RunID: K_110118A-5703254 Units: ug/kg
Analysis Date: 01/18/2011 11:59 Analyst: LU_L

Analyte	Result	Rep Limit
Toluene	ND	250
m,p-Xylene	ND	250
o-Xylene	ND	250
Xylenes,Total	ND	250
Surr: 1,2-Dichloroethane-d4	91.4	78-116
Surr: 4-Bromofluorobenzene	101.0	74-125
Surr: Toluene-d8	97.8	82-118

Laboratory Control Sample (LCS)

RunID: K_110118A-5703252 Units: ug/kg
Analysis Date: 01/18/2011 11:05 Analyst: LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Toluene	20.0	20.4	102	74	126
m,p-Xylene	40.0	41.1	103	71	129
o-Xylene	20.0	20.8	104	74	130
Xylenes,Total	60.0	61.9	103	71	130
Surr: 1,2-Dichloroethane-d4	50.0	45.4	90.9	78	116

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

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

Version 2.0 - Modified December 23, 2010

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

Quality Control Report

Conoco Phillips

San Juan 29-7 Unit 37

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 11010416
Method: SW8260B **Lab Batch ID:** R314523

Laboratory Control Sample (LCS)

RunID: K_110118A-5703252 Units: ug/kg
Analysis Date: 01/18/2011 11:05 Analyst: LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Surr: 4-Bromofluorobenzene	50.0	50.4	101	74	125
Surr: Toluene-d8	50.0	49.5	98.9	82	118

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

Sample Spiked: 11010296-08
RunID: K_110118A-5703541 Units: ug/kg-dry
Analysis Date: 01/18/2011 13:45 Analyst: LU_L
Preparation Date: 01/14/2011 11:31 Prep By: Method: SW5030B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	2710	2380	4750	85.9	2380	4800	87.9	1.01	24	80	117
m,p-Xylene	1390	4750	6370	105	4750	6110	99.3	4.06	20	69	127
o-Xylene	684	2380	2970	96.4	2380	2940	95.2	0.981	20	84	114
Xylenes,Total	2080	7130	9340	102	7130	9050	97.9	3.07	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	5940	5310	89.4	5940	5300	89.2	0.238	30	78	116
Surr: 4-Bromofluorobenzene	ND	5940	5890	99.3	5940	5790	97.4	1.86	30	74	125
Surr: Toluene-d8	ND	5940	5640	94.9	5940	5700	96.0	1.13	30	82	118

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

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

Version 2.0 - Modified December 23, 2010

Sample Receipt Checklist

And

Chain of Custody

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

Sample Receipt Checklist

Workorder:	11010416	Received By:	T_B
Date and Time Received:	1/15/2011 9:15:00 AM	Carrier name:	Fedex-Priority
Temperature:	2.0/2.0°C	Chilled by:	Water Ice

1.	Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐		
2.	Custody seals intact on shippping 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? Received DRO and PAH in a 16oz plastic, sample put on hold.	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:	1/17/2011 12:00:00 PM
Client Name Contacted:	Christine Matthews		

Non Conformance Issues:	
Client Instructions:	Elessa Sommers discussed by phone the plastic containers received for DRO and PAH analyses. Proceed with analyses per client request.

ChainofCustodyRecord

TetraTechEMI | **SPLWorkorderNumber:** 1101041 6

Attention: Cassandre Brown Email:cassandre.brown@tetratech.com

Phone:(505) 237-8440 | Fax:

Address:6121 IndianSchoolRd,NE,Ste200

City:Albuquerque | State:NM | ZipCode:87110

ProjectName:SanJuan29-7Unit37

SiteLocation: Rio Arriba County

SampledBy: signature | print: Christine Mattews

SampleID	Collected Date	Collected Time	SampleType Comp	SampleType Grab	Matrix Water	Matrix Soil	4 oz WMG	BTEX 8260	GRO 8015	DRO 8015	Terra Core Kit BTEX	BTEX	TPH GRO	TPH DRO & PAHs
B-1 (66-68)	1/14	1215		X		X			X	X	X			
B-1 (68-70)	1/14	1230		X		X			X	X	X			
B-1 (30-32)	1/14	1300		X		X			X	X	X			
B-1 (86-88)	1/14	1350		X		X			X	X	X			
B-1 (88-90)	1/14	1320		X		X			X	X	X			
B-1 (92-94)	1/14	1340		X		X			X	X	X			
B-1 (122.5-123.5)	1/14	1000		X		X			X	X	X			
B-1 (water)	1/14	0900		X	X							X	X	X

TurnaroundTimeRequirements: 24 hr( ) 48 hr( ) 72 hr( ) 5 wday( ) 10wday-Standard( )

Remarks: Rush H2O Analysis (soil standard turnaround)

Intact? Y or N

Temperature:_____

BottleTypes: 1: 3/40ml Vials 2. 1L Glass 3. 1L Plastic 4. 1L AmberGlass 5. 8oz Plastic

PreservativeTypes: 1: NONE 2. HNO3 3. HCL 4. H2SO4

Relinquished by	Date	Time	Received by
RelinquishedbySampler:	1/14/11	1600	Receivedby:
Relinquishedby:	Date	Time	Receivedby:
Relinquishedby:	1/15/11	9:15	ReceivedbySPL,Inc.

Page___of___