3R-398

Remediation Plan

DATE:
03/2009

TETRA TECH, INC.

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

March 31, 2009

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

RE: ConocoPhillips Scott Drake #1 Quarterly Groundwater Monitoring Report
Bloomfield, New Mexico

Dear Mr. von Gonten:

Enclosed please find a copy of the above-referenced document as compiled by Tetra Tech, Inc., formerly Maxim Technologies, for this Farmington area site.

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

Sincerely,

Kelly E. Blanchard

Kelly E. Blanchard
Project Manager/Geologist

Enclosures (1)

QUARTERLY GROUNDWATER MONITORING REPORT

CONOCOPHILLIPS
SCOTT DRAKE #1
FARMINGTON, NEW MEXICO

OCD # 3R-398

Prepared for:

ConocoPhillips

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

Prepared by:

TETRA TECH, INC.

6121 Indian School Rd. NE, Suite 200
Albuquerque, NM 87110
Tetra Tech Project No. 9690116.100

March 2009

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

QUARTERLY GROUNDWATER MONITORING REPORT CONOCOPHILLIPS SCOTT DRAKE #1 FARMINGTON, NEW MEXICO

1.0 INTRODUCTION

This report presents the results of the groundwater monitoring events conducted by Tetra Tech, Inc. (Tetra Tech) on October 22, 2008 and January 20, 2009, at the ConocoPhillips Scott Drake #1 site in Farmington, New Mexico (Site).

The Site is located in the northeast quarter of the southwest quarter of Section 2, Township 29 North, Range 13 West within the Scott Drake Ranch in the city of Farmington, New Mexico. The Site consists of a gas production well and associated equipment. The location and general features of the Site are shown on Figures 1 and 2, respectively.

1.1 Site History

The history of the Site is outlined on Table 1 and discussed in more detail in the following paragraphs.

The environmental investigation at the Site began as a result of a failure in a high level detection alarm in a 90 barrel horizontal underground storage tank (UST) on June 18, 2003. As a result of this failure, approximately 5 barrels (210 gallons) of condensate was discharged onto Site soils. An excavation began on June 19, 2003, the purpose of which was to remove hydrocarbon contaminated soils from the Site, to backfill the excavation with clean soils, and to remove the UST from the Site. During the course of the excavation, black, hydrocarbon stained soils were encountered at a depth of three (3) feet below ground surface (bgs) to a depth of ten (10) feet bgs. The New Mexico Oil Conservation Division (OCD) form C-141, Release Notification and Corrective Action, was filled out on the date of the incident by ConocoPhillips staff (Appendix A). An attachment to this report stated that that an historical spill occurred at the Site approximately 15 years prior to the June 2003 incident and that a large remediation project took place at the Site as a result of this prior spill; the bulk of the stained soils from three (3) to ten (10) feet bgs were thought to be from the historical spill. The excavation was completed on June 20, 2003, and was successful in removing approximately 150 cubic yards of hydrocarbon-impacted soils from the Site.

Three (3) piezometers were installed at the Site in July 2004 by Blagg Engineering of Bloomfield, New Mexico. The first piezometer (MW-1) was found to be dry at a depth of 13.3 feet bgs; cobbles prevented further drilling below this depth. Water was found at a depth of six (6) feet bgs and 7.2 feet bgs in piezometers MW-2 and MW-3, respectively, and no groundwater or soil samples were collected during the installation of the piezometers (Blagg Engineering, 2004).

In January 2005, Blagg Engineering began the installation of three (3) groundwater monitoring wells at the Site (MW-4, MW-5, and MW-6). Due to large cobbles and boulders discovered in the subsurface

during well installation, the project was postponed in order to bring a high pressure, down-hole hammer to the Site. All three groundwater monitoring wells were complete by March 9, 2005, following the subsequent damage and repair of this equipment. The first groundwater samples were collected on March 23, 2005, and groundwater analytical results from this date indicated that the two down-gradient monitoring wells (MW-4, MW-6) were not impacted by hydrocarbons, and only trace amounts of metals were detected at concentrations well below New Mexico Water Quality Control Commission (NMWQCC) groundwater standards for human health or domestic water supply. Groundwater monitoring well MW-5 was installed in the original source area of the hydrocarbon spill, and analytical results revealed the presence of ethylbenzene, naphthalenes and xylenes, but in concentrations below NMWQCC groundwater standards (Blagg Engineering, 2005). Blagg Engineering states that the groundwater direction at the Site is to the south, southwest, and mentions that the groundwater gradient is "substantial" at 0.18 feet/feet (ft/ft), with "normal" gradients in the area on the order of 0.01 to 0.05 ft/ft. The steep groundwater gradient at the Site is thought to be a result of a sandstone bench beneath the Site that contains a steep drop off (Blagg Engineering, 2005).

2.0 METHODOLOGY AND RESULTS

The following sections describe the groundwater monitoring methodology used at the Site and results of laboratory analysis of groundwater samples.

2.1 Groundwater Monitoring Methodology

Groundwater Elevation Measurements

Prior to the start of groundwater sampling activities, the depth to water within groundwater monitoring wells MW-4, MW-5, and MW-6 were gauged using an interface probe, and the results were recorded on groundwater sampling field forms (Appendix B). The probe was decontaminated with an Alconox solution and de-ionized water before each monitoring well was gauged. Depth to water in groundwater monitoring well MW-5 was recorded on October 24, 2008 at a depth of 11.43 feet below the top of the casing (TOC) in this well. Depths to water in monitoring wells MW-4, MW-5, and MW-6 were recorded from the TOCs on January 20, 2009 at 20.37, 12.33, and 23.85 feet, respectively.

Table 2 presents the monitor well specifications and groundwater level data. The January 2009 groundwater elevation contour map indicates that groundwater at the Site flows along a steep gradient to the southwest (Figure 3). See Section 1.1 for a brief synopsis of the 2005 Blagg Engineering report wherein the steepness of the groundwater gradient at the Site is discussed.

Groundwater Sampling

Groundwater monitoring well MW-5 was sampled on October 24, 2008 and groundwater monitoring wells MW-4, MW-5, and MW-6 were sampled on January 20, 2009 as a continuation of quarterly monitoring at the Site. Three well volumes were purged from each monitoring well before sampling was performed. A 1.5-inch submersible GeoSquirt pump was used to purge the well and to collect the groundwater sample. The purge water generated during the event was disposed of in the on-site waste water tank (Figure 2). The groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped with chain-of-custody documentation to Southern Petroleum Laboratory located in Houston, Texas. The sample obtained from MW-5 in October 2008 was analyzed for diesel range organics (DRO) and gasoline range organics (GRO) by Environmental Protection Agency (EPA) method 8015B; major ions by EPA method 300.0; total metals by EPA methods 7470A, 6010B, and 6020A; nitrate as nitrogen by EPA method 353.2; semi-volatile organic compounds (SVOCs) by EPA method 8270C; and volatile organic compounds (VOCs) by EPA method 8260B. During the January 2009 sampling event, groundwater monitoring wells MW-4, MW-5, and MW-6 were analyzed for the presence of benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA method 8260B.

2.2 Groundwater Sampling Analytical Results

Results from the October 2008 groundwater sampling event at MW-5 revealed a lack of evidence of hydrocarbon impacts. SVOC analysis of groundwater collected from MW-5 did not show results above the respective method detection limits (MDLs) for 69 analytes, and BTEX results were also below MDLs for these constituents. Major ions and total metals concentrations were detected in trace amounts or were below MDLs for all analyses conducted with the exception of iron, which was detected at a concentration of 2.1 milligrams per liter (mg/l). The NMWQCC domestic water supply groundwater standard for iron is 1.0 mg/l.

During the January 2009 groundwater sampling event, BTEX analysis was performed on samples collected from MW-4, MW-5 and MW-6. BTEX was not detected above the MDLs for any of these constituents.

Laboratory analytical data are summarized on Table 3, the field groundwater sampling forms are presented in Appendix B, and the laboratory analytical reports from the October 2008 and the January 2009 groundwater monitoring events are presented in Appendix C. A geologic cross section has also been prepared using data obtained from the boring logs created during the installation of MW-4, MW-5, and MW-6 (Figure 4).

3.0 CONCLUSIONS

Tetra Tech will continue quarterly groundwater sampling at the Site. Due to the exceedence of the NMWQCC groundwater quality standard for iron in MW-5, this constituent will be added to the BTEX analysis that is currently the basis of the groundwater monitoring program at the Site. The next

groundwater sampling event is scheduled for April 2009. Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetratech.com if you have any questions or require additional information.

4.0 REFERENCES

Blagg Engineering, Inc. (2004). *ConocoPhillips - Scott No. 1 – Letter Report on Piezometer Installation, (K) Sec 2 – T29N-R13W, San Juan County, New Mexico.* Prepared for ConocoPhillips Threadneedle Office, Houston, TX. Report Dated March 29. 7 pp.

Blagg Engineering, Inc. (2005). *Groundwater Quality Investigation, ConocoPhillips Scott No. 1, (K) Sec 2 – T29N-R13W, San Juan County, New Mexico.* Prepared for ConocoPhillips Threadneedle Office, Houston, TX. Report Dated April 19. 55 pp.

FIGURES

1. Site Location Map
2. Site Layout Map
3. Groundwater Elevation Contour Map
4. Site Geologic Cross Section

FIGURE 1.

Site Location Map
ConocoPhillips Company
Scott Drake No. 1
Farmington, NM
OCD #3R-398

ConocoPhillips
Scott Drake No. 1
Site location

0 175 350
FEET

Source: Google Earth™; scale is approximate

N

TETRA TECH, INC.

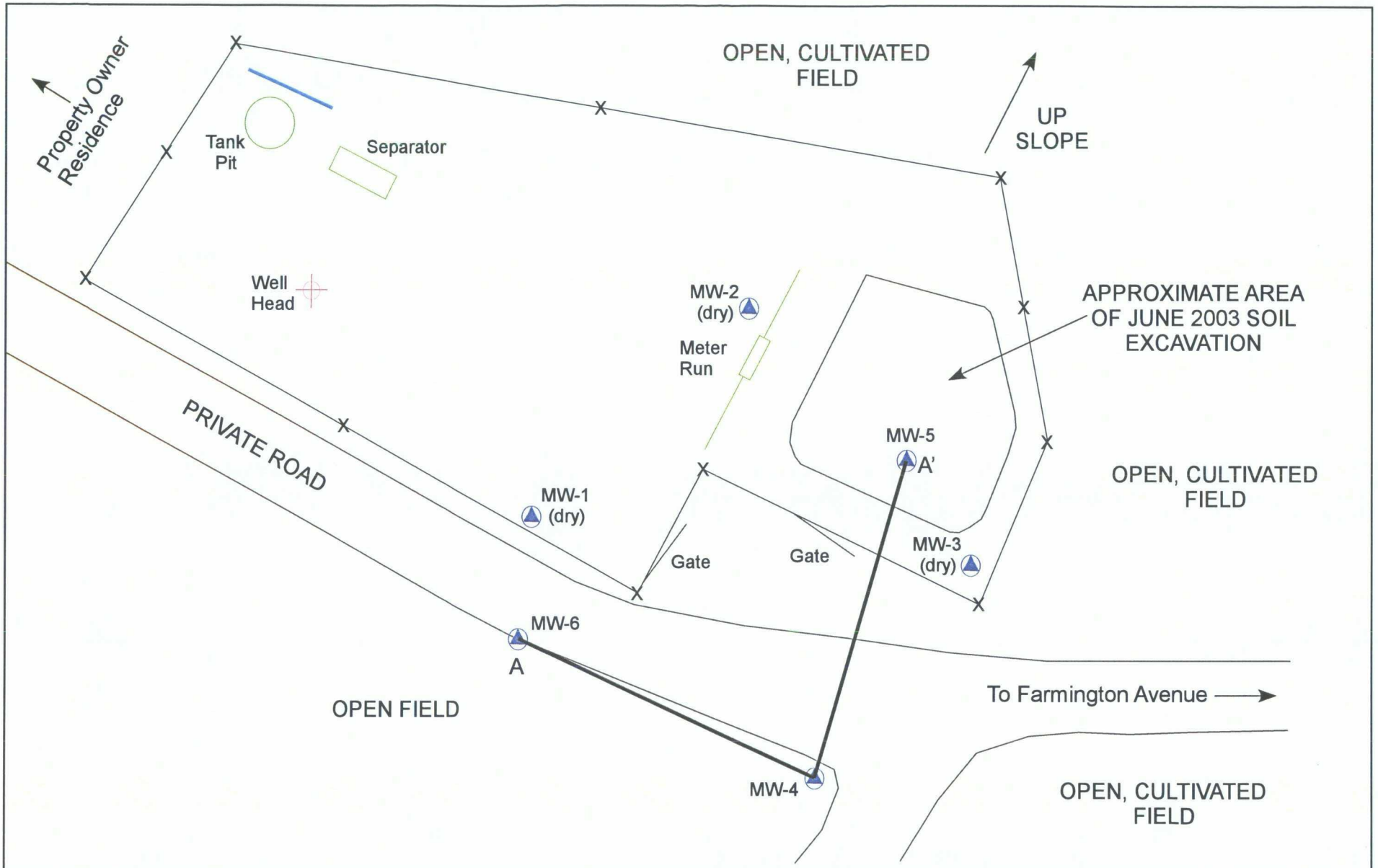


FIGURE 2:
SITE LAYOUT MAP
CONOCOPHILLIPS COMPANY
SCOTT DRAKE No. 1
Sec 2, T29N, R13W
Farmington, New Mexico
OCD #3R-398

LEGEND

- WELLHEAD
- MONITORING WELL
- FENCE
- BERM
- EQUIPMENT
- CROSS SECTION (Fig 4.)

0 30 60 FEET

Site Layout Source: Blagg Engineering, 2005

N

TETRA TECH, INC.

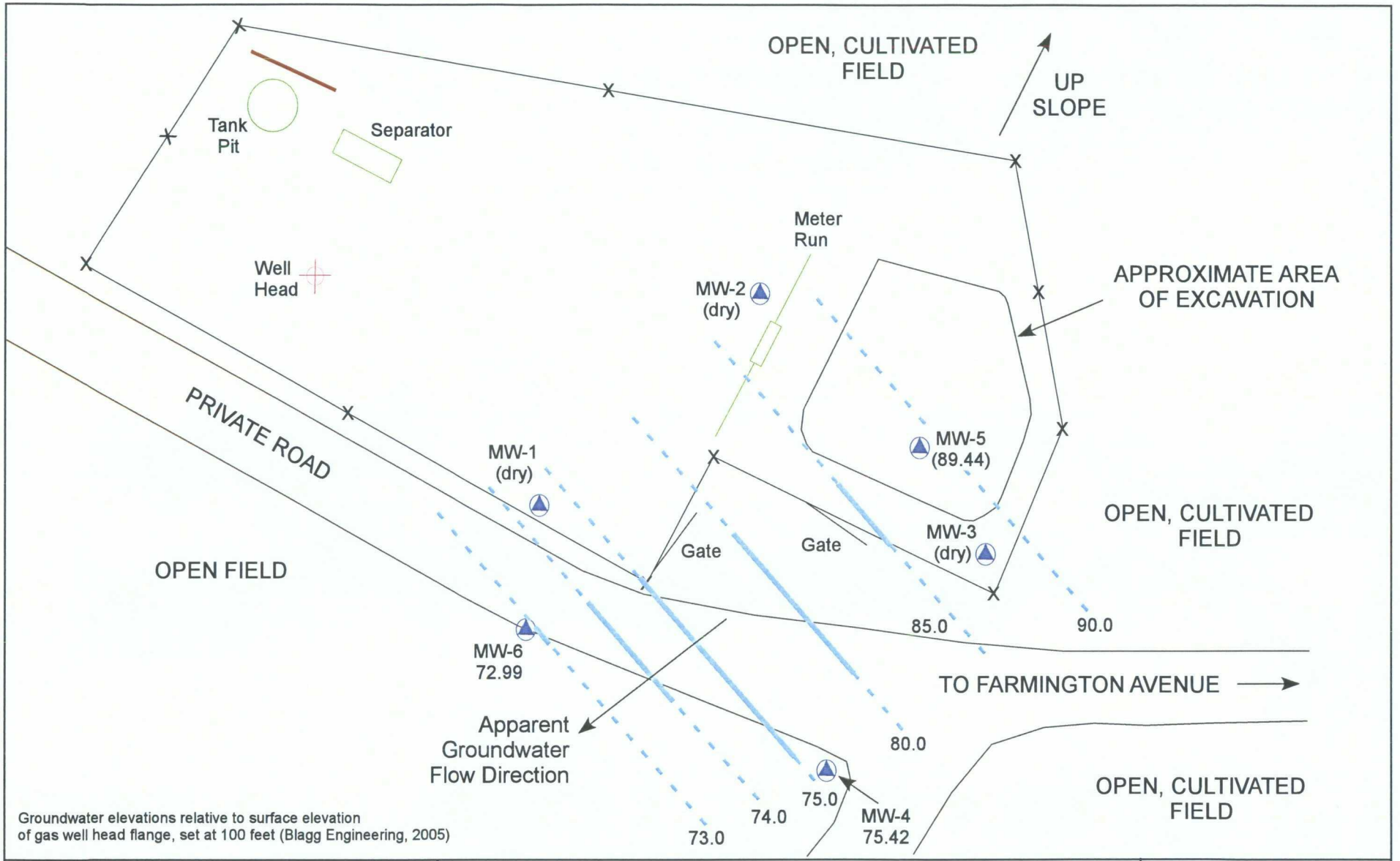


FIGURE 3:
GROUNDWATER ELEVATION MAP
JANUARY 2009
CONOCOPHILLIPS COMPANY
SCOTT DRAKE No. 1
Sec 2, T29N, R13W
Farmington, New Mexico
OCD #3R-398

LEGEND

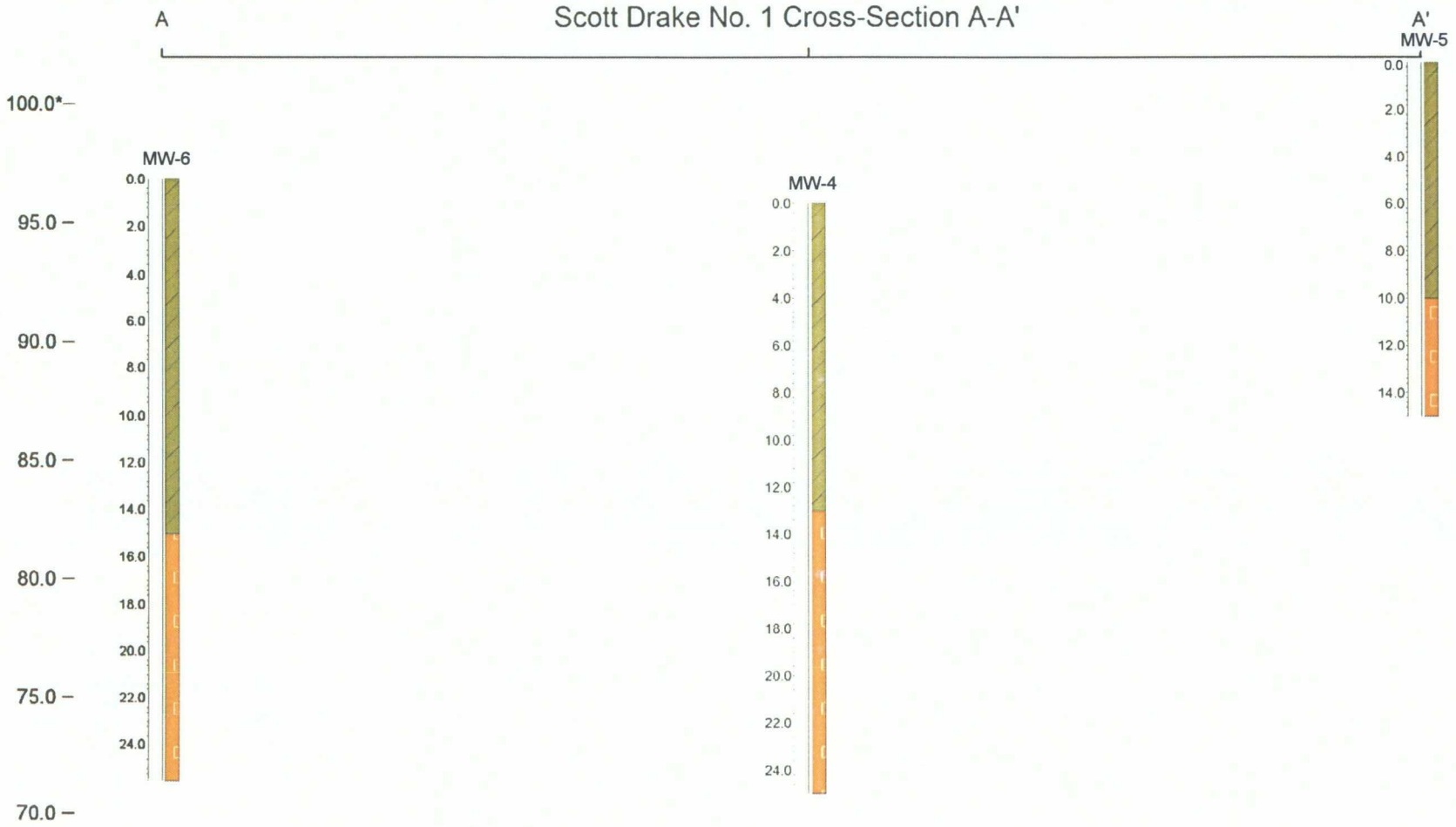
- 73.0 — GROUNDWATER GRADIENT & RELATIVE ELEVATION (dashed where inferred)
- BERM
- EQUIPMENT
- MONITORING WELL
- WELLHEAD
- FENCE

Site Layout Source: Blagg Engineering, 2005

0 30 60 FEET

N

TETRA TECH, INC.



*Groundwater elevations relative to surface elevation of gas well head flange, set at 100 feet (Blagg Engineering, 2005)

FIGURE 4:
GEOLOGIC CROSS SECTION
CONOCOPHILLIPS COMPANY
SCOTT DRAKE No. 1
Sec 2, T29N, R13W
Farmington, New Mexico
OCD #3R-398

LEGEND

- Silty, sandy clay
- River cobbles and boulders

TETRA TECH, INC.

TABLES

Scott Drake No. 1
Table 1 - Site History Timeline

Date/Time Period	Event/Action	Description/Comments
June 18, 2003	5 barrel (BBL) condensate spill discovered	Spill is the result of a high level detection alarm failure in a 90 BBL horizontal underground storage tank (UST).The New Mexico Oil Conservation Division (OCD) and the site landowners Alan and Gail McCulloch (daughter of Jimmy Drake) are notified regarding the spill.
June 19, 2003	Excavation begins at the site	An excavation begins and goes to 10 feet below ground surface (bgs) where water is encountered. Black soils present from 3 to 10 feet bgs; a large remediation project took place at the site 15 years prior to the 2003 spill, and the majority of the stained soils are thought to be from the prior event.
June 20, 2003	UST removed, excavation completed	UST removed and taken for leak testing. Approximately 150 cubic yards of soil removed from an excavation measuring 20 ft x 20 ft x 10 ft deep.
March 29, 2004	Letter report sent to ConocoPhillips by Blagg Engineering of Bloomfield, NM	Report documents installation of three piezometers at the site. Piezometers installed within the fenced area of the site, and extended from 8 to 13 feet bgs. Below this depth, cobbles were encountered that prevented further boring advancement. Depth to water in MW-1 was not found at a total depth of 13.3 feet bgs, MW-2 depth to water was measured at 6.0 feet bgs, and depth to water in MW-3 was measured at 7.2 feet bgs. Although only two wells produce depth to water data, the general groundwater flow direction was stated to be to the southwest.
September 28, 2004	OCD letter sent to Mr. Neal Goates of ConocoPhillips in Houston, TX	OCD requires ConocoPhillips to install a groundwater monitoring well "downgradient and directly adjacent to the excavated area of the spill". OCD directs ConocoPhillips to sample this well no less than 24 hours after the well is developed, and to submit groundwater samples for benzene, toluene, ethylbenzene, and xylenes (BTEX); polycyclic aromatic hydrocarbons (PAH), total dissolved solids (TDS); and New Mexico Water Quality Control Commission (NMWQCC) metals and major cations and anions using EPA approved methods. OCD requests an opportunity to split samples with ConocoPhillips. OCD requires ConocoPhillips to submit a comprehensive report to OCD by December 28, 2004.
April 19, 2005	Groundwater Quality Investigation report submitted to ConocoPhillips by Blagg Engineering	Groundwater monitoring wells MW-4, MW-5, and MW-6 installed at the site; groundwater is found at depths ranging between 12 and 20 feet bgs. The monitoring wells were all developed and subsequently sampled for OCD required parameters. Analytical test results from downgradient monitoring wells MW-4 and MW-6 indicate an absence of hydrocarbon impacts and trace amounts of metals well below NMWQCC drinking water standards. MW-5 was installed in the original source area of the release, and analytical results reveal the presence of ethylbenzene, naphthalenes, and xylenes; however concentrations of these analytes were all below NMWQCC drinking water standards. The groundwater gradient was determined to be 0.18 ft/ft in a south/southwest direction. Blagg Engineering recommends a minimum of one additional sampling event to confirm water quality results.

Scott Drake No. 1
Table 1 - Site History Timeline

Date/Time Period	Event/Action	Description/Comments
April 19, 2005	Groundwater Quality Investigation report submitted to ConocoPhillips by Blagg Engineering	Report notes that the groundwater gradient is substantial at 0.18 ft/ft, with normal gradients in the San Juan Basin ranging from 0.01 to 0.05 ft/ft. Blagg Engineering states that although none of the borings penetrated the cobble layer beneath the site, regional stratigraphy indicates that a sandstone bench may be found beneath the site. Blagg states that this bench may contain a steep drop off that is dictating the steep site gradient. In addition, an irrigation season in the area of the site runs from April 15 to October 15, which can be expected to cause the water table to rise during this time. The time frame for sampling at the site is therefore recommended for late summer, after seasonal irrigation of area crops "has time to affect local groundwater flow".
October 24, 2008	Groundwater sampling of MW-5	Tetra Tech, Inc. (Tetra Tech) samples MW-5 for semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), metals, and major ions. Iron is found at a concentration of 2.1 mg/L, in excess of the NMWQCC drinking water standard of 1.0 mg/L. The remaining analytes are either substantially below NMWQCC drinking water standards or are not found above their respective method detection limits.
January 20, 2009	Groundwater sampling of MW-4, MW-5, MW-6	Tetra Tech samples site wells for BTEX. None of the groundwater samples are found to contain any BTEX constituent above the 5 microgram per liter (µg/L) method detection limit.

Scott Drake No. 1
Table 2 - Groundwater Elevation Summary (March 2005 - January 2009)

Well No.	Date	Surface Elevation, Top of Casing* (ft)	Well Total Depth (ft below ground surface)	Screened Interval (ft below TOC)	Depth to Water (ft below TOC)	Relative Water Table Elevation (ft BMP)
MW-1	3/23/2005	99.74	14.63	9.58 - 14.08	Dry to TD	N/A
	10/24/2008					
	1/20/2009					
MW-2	3/23/2005	Damaged	10.00	5.00 - 10.00	Well damaged	N/A
	10/24/2008					
	1/20/2009					
MW-3	3/23/2005	98.76	9.92	4.92 - 9.92	Dry to TD	N/A
	10/24/2008					
	1/20/2009					
MW-4	3/23/2005	95.79	25.00	15.00 - 24.00	20.25	75.54
	10/24/2008				No data	No data
	1/20/2009				20.37	75.42
MW-5	3/23/2005	101.77	15.33	5.83 - 14.83	13.18	88.59
	10/24/2008				11.43	90.34
	1/20/2009				12.33	89.44
MW-6	3/23/2005	96.84	25.5	14.50 - 23.5	21.89	74.95
	10/24/2008				No data	No data
	1/20/2009				23.85	72.99

*Casing elevations are based on a 100 foot relative surface elevation of the gas well head flange (Biagg Engineering, 2005).
BMP = Below measuring point
TOC = Top of Casing

Scott Drake No. 1

Table 3 - Groundwater Laboratory Analytical Results Summary (March 2005 through January 2009)

Sample Location	Date Sampled	SW846 8270C micrograms per liter (µg/L)	SW846 8260B (µg/L)[1]								SW 8015B milligrams per liter (mg/L)		SW846 7470A (mg/L), Total	SW846 6010B (mg/L), Total					SW846 6020A (mg/L), Total							MCAWW E300 (mg/L)				MCAWW E353.2 (mg/L)
		69 Semi-Volatile Compounds	Benzene	Toluene	Ethylbenzene	Xylenes	1,2,4-Tri-methylbenzene	1,3,5-Tri-methylbenzene	Isopropyl-benzene	n-propyl-benzene	TPH-DRO	TPH-GRO	Mercury	Calcium	Manganese	Magnesium	Iron	Sodium	Arsenic	Barium	Chromium	Cadmium	Selenium	Silver	Lead	Chloride	Fluoride	Orthophosphate (as P)	Sulfate	Nitrate as N
MW-4	3/23/2005	NS	< 1.0	< 1.0	< 1.0	< 1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/24/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/20/2009	NS	< 5	< 5	< 5	< 5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	3/23/2005	NS	< 2.0	< 2.0	40	220	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/24/2008	No detections	< 5	< 5	< 5	< 5	9	9	5	7	0.3	1.3	< 0.0002	136	0.118	30.2	**2.1**	33	< 0.005	0.0654	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	15.6	< 2	< 5	163	1.18
	1/20/2009	NS	< 5	< 5	< 5	< 5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	3/23/2005	NS	< 1.0	< 1.0	< 1.0	< 1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/24/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/20/2009	NS	< 5	< 5	< 5	< 5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
WQCC Groundwater Standards for Human Health or Domestic Water Supply			**10**	**750**	**750**	**620**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**0.002**	**NE**	**NE**	**NE**	**1.0**	**NE**	**0.1**	**1.0**	**0.05**	**0.01**	**0.05**	**0.05**	**0.05**	**250**	**1.6**	**NE**	**600**	**10**

Explanation

MCAWW - "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983, subsequent revisions included

MW - Monitoring Well

NE - Not established by NMWQCC

WQCC - New Mexico Water Quality Control Commission

NS - Not Sampled

SW846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986, updates included

Values in **bold** indicate an exceedance of the NMWQCC standard

[1]All other constituents were below their respective method detection limits for the 10/24/08 sampling event for MW-5

APPENDIX A

FORM C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	ConocoPhillips Company	Contact	Neal Goates
Address	5525 Hwy. 64, Farmington, NM 87401	Telephone No.	832-379-6427
Facility Name	Scott #1	Facility Type	Gas well

API #30-045-13094

Surface Owner	Mineral Owner	Lease No.
Fee	Fee	Fee

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	2	T29N	R13W	2220	South	1450	West	San Juan

NATURE OF RELEASE

Type of Release: Condensate	Volume of Release: Estimated 5 BBL	Volume Recovered: none
Source of Release: Underground tank overflowed due to detection system failure	Date and Hour of Occurrence: 6/18/2003	Date and Hour of Discovery: 6/18/2003 – 1130 hr
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Alan & Gail McCulloch – 6/18/03 @ 1330 hr – via phone; Denny Foust – OCD – 6/18/2003 @ 1600 hr – via email	
By Whom? Monica D. Rodahl	Date and Hour: 6/18/2003 – 1600 hr	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* Shallow water from what appears to be an irrigation supply was impacted.

Describe Cause of Problem and Remedial Action Taken.* A high level / leak detection alarm failed on an underground condensate tank, causing the tank to overflow, resulting in an estimated 5 BBL spill. Lines were shut in and an emergency one-call was placed to excavate stained soils and investigate detection failure.

Describe Area Affected and Cleanup Action Taken.*
The area affected is on the Drake Ranch south of 30th Street in Farmington. The landowner (Gail McCulloch) was promptly notified. Remediation commenced on 6/19/03. See attached report.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Neal Goates	OIL CONSERVATION DIVISION
Printed Name: Neal Goates	Approved by District Supervisor:
Title: Site Manager	Approval Date: / Expiration Date:
Date: 2-17-06 Phone: 832-379-6427	Conditions of Approval: / Attached ☐

* Attach Additional Sheets If Necessary

APPENDIX B

GROUNDWATER SAMPLING FIELD FORMS

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name ~~Fae Burdette #1~~ Scott Drake #1 Page 1 of 1

Project No.

Site Location Aztec, NM

Site/Well No. ~~MW-1~~ MW-5 Coded/ Replicate No. Date 10-24-08

Weather Sunny, cold Time Sampling Began 9:00 Time Sampling Completed 9:15

EVACUATION DATA

Description of Measuring Point (MP)

Height of MP Above/Below Land Surface MP Elevation

Total Sounded Depth of Well Below MP 16.30 Water-Level Elevation

Held Depth to Water Below MP 11.43 Diameter of Casing 2"

Wet Water Column in Well Gallons Pumped/Bailed Prior to Sampling 2.25

Gallons per Foot 0.16

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

Purging Equipment (bailer) / purge pump

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (C°)	pH	Conductivity	TDS in g/L	ORP (mV)	DO
9:04	15.38	7.25	0.967	0.630	-225.1	5.05
9:06	16.02	7.13	0.991	0.644	-238.0	3.21
9:08	16.03	7.07	0.992	0.648	-241.9	2.70

Sampling Equipment Disposable polyethylene bailer

Constituents Sampled	Container Description	Preservative
~~BTEX~~ Base line	3 - 40 mL glass VOAs	HCL

Remarks odorous, black water with black stringy bits

Sampling Personnel Christine Mathews, Ana Moreno

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

WATER SAMPLING FIELD FORM

Project No. Col Scott Drake — 1 of 3

Site Location Farmington Ave. / 30th / Drake Ranch

Site/Well No. MW-4 — Coded/Replicate No. ____ — Date 1.20.09

Weather Sunny, Cool (50°) — Time Sampling Began 1320 — Time Sampling Completed 1350

EVACUATION DATA

Description of Measuring Pt (MP) TOC

Height of MP Above/Below Land Surface ____ — MP Elevation ____

Total Sounded Depth of Well Below MP 24.68 — Water-Level Elevation ____

Held ____ — Depth to Water Below MP 20.37 — Diameter of Casing (2 inch) / 4 inch

Wet ____ — Water Column in Well 4.31 — Gallons Pumped/Bailed Prior to Sampling 7

Gallons per Foot .16

Gallons in Well .68 — Sampling Pump Intake (feet below land surface) N/A

Purging Equipment TOC

SAMPLING DATA/FIELD PARAMETERS

µS/cm

	Time	Temperature	pH	Conductivity	TDS	DO	DO%	ORP	Other
4gal	1340	15.31	7.05	.860	.685	1.58	13.7	57.9	
	1342	15.28	7.07	.860	.687	1.60	16.2	28.1	
5gal	1343	15.23	7.03	.859	.686	1.36	13.6	-2.9	
7gal	1346	15.15	7.05	.856	.685	1.79	18.3	-17.9	

Sampling Equipment Low Flow Pump / Disposable Bailer

Constituents Sampled	Container Description	Preservative
~~3 VOAs~~ / BTEX	3 Glass VOAs	HCL

Remarks black sediment, no odor, no sheen

Sampling Personnel CM, KB

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

WATER SAMPLING FIELD FORM

Project No. GeoScott Drake — 2 of 3

Site Location Farmington Ave. / 20th St. (Drake Ranch)

Site/Well No. MW- 6 — Coded/ Replicate No. — Date 1.20.09

Weather Sunny, cool — Time Sampling Began 1350 — Time Sampling Completed 1405

EVACUATION DATA

Description of Measuring Pt (MP) TOC

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 23.85 — Diameter of Casing (2 inch / 4 inch)

Wet — Water Column in Well 21.77 — Gallons Pumped/Bailed Prior to Sampling .99 gallons → 3 gallons

Gallons per Foot .16

Gallons in Well .33 — Sampling Pump Intake (feet below land surface) N/A

Purging Equipment TOC

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature	pH	Conductivity	TDS	DO	DO%	ORP	Other
1400	15.22	7.06	.724	.572	3.01	30.1	-155.9	
1402	15.28	7.03	.730	.583	1.55	14.9	-188	
1403	15.35	7.01	.731	.582	.88	8.8	-206.0	
1405	15.43	7.01	.733	.583	.64	6.4	-241.3	

2.5 gallons

Sampling Equipment Low Flow Pump / Disposable Bailer

Constituents Sampled	Container Description	Preservative
3 VOAs / BTEX	Glass VOAs	HCl

Remarks ~~sulfur~~ sulfur odor was black; then clear. Very fast recharge; no to little drawdown when bailed

Sampling Personnel CM, KB

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

WATER SAMPLING FIELD FORM

Project No. Co P Scott Drake — 3 of 3

Site Location Farmington Ave / 30th Street (Drake Ranch)

Site/Well No. MW- 5 — Coded/ Replicate No. Duplicate — Date 1.20.09

Weather Sunny, cool — Time Sampling Began 1410 — Time Sampling Completed 1425

EVACUATION DATA

Description of Measuring Pt (MP) TOC

Height of MP Above/Below Land Surface — MP Elevation

Total Sounded Depth of Well Below MP 16.5 — Water-Level Elevation

Held — Depth to Water Below MP 12.33 — Diameter of Casing (2 inch / 4 inch)

Wet — Water Column in Well — Gallons Pumped/Bailed Prior to Sampling 4

Gallons per Foot .16

Gallons in Well .66 — Sampling Pump Intake (feet below land surface) N/A

Purging Equipment

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature	pH	Conductivity	TDS	DO	DO%	ORP	Other
1420	12.78	7.09	.664	.563	3.10	26.5	-202.9	
1422	12.97	7.09	.668	.565	1.27	12.1	-245.7	
1424	12.95	7.10	.671	.567	1.15	10.9	-257.8	

2 gal

Sampling Equipment — Low Flow Pump / (Disposable Bailer)

Constituents Sampled	Container Description	Preservative
BTEX	3 voas	HCl

Remarks Weathered Hydrocarbon odor, has orange & black material in ~~the water~~ otherwise

Sampling Personnel CM, KB

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

Duplicate collected @ 1430

Dark grey in color

APPENDIX C

LABORATORY ANALYTICAL REPORTS

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

Conoco Phillips

Certificate of Analysis Number:

08101614

Report To:		Project Name:	COP Scott Drake No 1
Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax:		Site:	San Juan City, NM
		Site Address:	
		PO Number:	4510447839
		State:	New Mexico
		State Cert. No.:	
		Date Reported:	2/12/2009

This Report Contains A Total Of 34 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

2/12/2009

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:

08101614

Report To:		Project Name:	COP Scott Drake No 1
Tetra Tech, Inc.		Site:	San Juan City, NM
Kelly Blanchard		Site Address:	
6121 Indian School Road, N.E.			
Suite 200		PO Number:	4510447839
Albuquerque		State:	New Mexico
NM		State Cert. No.:	
87110-		Date Reported:	2/12/2009
ph: (505) 237-8440	fax:		

Per your request on February 12, 2009, this report was revised to change the sample ID from "MW-3" to "MW-5".

All samples received outside the 48-hour hold time for Nitrate and Orthophosphate analysis. Per historical records, SPL, Inc continued with analysis.

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

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

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: 84920 for the Diesel Range Organics analysis by Method 8015B. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID:84949 for the Semivolatile Organics analysis by SW846 Method 8270C. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

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

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

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

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

Erica Cardenas

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:

08101614

Report To:	Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax: (505) 881-3283	**Project Name:**	COP Scott Drake No 1
		Site:	San Juan City, NM
		Site Address:	
		PO Number:	4510447839
		State:	New Mexico
		State Cert. No.:	
Fax To:		**Date Reported:**	2/12/2009

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-5	08101614-01	Water	10/24/2008 9:15:00 AM	10/28/2008 9:30:00 AM		☐

Erica Cardenas
Project Manager

2/12/2009
Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer

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

Client Sample ID: MW-5 **Collected:** 10/24/2008 9:15 **SPL Sample ID:** 08101614-01

Site: San Juan City, 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)	0.3		0.1		1	11/07/08 8:47	NW	4757265
Surr: n-Pentacosane	63.8		% 20-150		1	11/07/08 8:47	NW	4757265

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	10/29/2008 18:43	N_M	1.00

GASOLINE RANGE ORGANICS				**MCL**	**SW8015B**	**Units: mg/L**		
Gasoline Range Organics	1.3		0.1		1	11/04/08 2:28	WLV	4749741
Surr: 1,4-Difluorobenzene	130		% 60-155		1	11/04/08 2:28	WLV	4749741
Surr: 4-Bromofluorobenzene	125		% 50-158		1	11/04/08 2:28	WLV	4749741
ION CHROMATOGRAPHY				**MCL**	**E300.0**	**Units: mg/L**		
Chloride	15.6		2		4	11/10/08 21:21	TW	4766031
Fluoride	ND		2		4	11/10/08 21:21	TW	4766031
Ortho-phosphate (As P)	ND		5		10	11/20/08 7:04	TW	4780774
Sulfate	163		50		100	11/11/08 15:16	TW	4766448
MERCURY, TOTAL				**MCL**	**SW7470A**	**Units: mg/L**		
Mercury	ND		0.0002		1	11/06/08 14:19	F_S	4755690

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7470A	11/06/2008 13:18	F_S	1.00

METALS BY METHOD 6010B, TOTAL				**MCL**	**SW6010B**	**Units: mg/L**		
Calcium	136		0.1		1	10/31/08 13:44	S_C	4745446
Iron	2.05		0.02		1	10/31/08 13:44	S_C	4745446
Magnesium	30.2		0.1		1	10/31/08 13:44	S_C	4745446
Manganese	0.118		0.005		1	10/31/08 13:44	S_C	4745446
Sodium	33		0.5		1	10/31/08 13:44	S_C	4745446

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	10/30/2008 15:30	BDG	1.00

METALS BY METHOD 6020A, TOTAL				**MCL**	**SW6020A**	**Units: mg/L**		
Arsenic	ND		0.005		1	10/31/08 17:06	AL_H	4746383
Barium	0.0654		0.005		1	10/31/08 17:06	AL_H	4746383
Cadmium	ND		0.005		1	10/31/08 17:06	AL_H	4746383
Chromium	ND		0.005		1	10/31/08 17:06	AL_H	4746383
Lead	ND		0.005		1	10/31/08 17:06	AL_H	4746383
Selenium	ND		0.005		1	10/31/08 17:06	AL_H	4746383
Silver	ND		0.005		1	10/31/08 17:06	AL_H	4746383

Qualifiers:

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

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

Client Sample ID: MW-5 **Collected:** 10/24/2008 9:15 **SPL Sample ID:** 08101614-01

Site: San Juan City, NM

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

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	10/30/2008 15:30	BDG	1.00

NITRATE NITROGEN (AS N), TOTAL				MCL	E353.2	Units: mg/L	
Nitrogen,Nitrate (As N)	1.18		0.5	1	11/03/08 15:17	TW	4757605

Qualifiers:

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

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

Client Sample ID: MW-5 **Collected:** 10/24/2008 9:15 **SPL Sample ID:** 08101614-01

Site: San Juan City, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/L**		
1,2,4-Trichlorobenzene	ND		5	1	11/06/08 15:57	GY	4755803
1,2-Dichlorobenzene	ND		5	1	11/06/08 15:57	GY	4755803
1,2-Diphenylhydrazine	ND		10	1	11/06/08 15:57	GY	4755803
1,3-Dichlorobenzene	ND		5	1	11/06/08 15:57	GY	4755803
1,4-Dichlorobenzene	ND		5	1	11/06/08 15:57	GY	4755803
2,4,5-Trichlorophenol	ND		10	1	11/06/08 15:57	GY	4755803
2,4,6-Trichlorophenol	ND		5	1	11/06/08 15:57	GY	4755803
2,4-Dichlorophenol	ND		5	1	11/06/08 15:57	GY	4755803
2,4-Dimethylphenol	ND		5	1	11/06/08 15:57	GY	4755803
2,4-Dinitrophenol	ND		25	1	11/06/08 15:57	GY	4755803
2,4-Dinitrotoluene	ND		5	1	11/06/08 15:57	GY	4755803
2,6-Dinitrotoluene	ND		5	1	11/06/08 15:57	GY	4755803
2-Chloronaphthalene	ND		5	1	11/06/08 15:57	GY	4755803
2-Chlorophenol	ND		5	1	11/06/08 15:57	GY	4755803
2-Methylnaphthalene	ND		5	1	11/06/08 15:57	GY	4755803
2-Nitroaniline	ND		25	1	11/06/08 15:57	GY	4755803
2-Nitrophenol	ND		5	1	11/06/08 15:57	GY	4755803
3,3'-Dichlorobenzidine	ND		10	1	11/06/08 15:57	GY	4755803
3-Nitroaniline	ND		25	1	11/06/08 15:57	GY	4755803
4,6-Dinitro-2-methylphenol	ND		25	1	11/06/08 15:57	GY	4755803
4-Bromophenyl phenyl ether	ND		5	1	11/06/08 15:57	GY	4755803
4-Chloro-3-methylphenol	ND		5	1	11/06/08 15:57	GY	4755803
4-Chloroaniline	ND		5	1	11/06/08 15:57	GY	4755803
4-Chlorophenyl phenyl ether	ND		5	1	11/06/08 15:57	GY	4755803
4-Nitroaniline	ND		25	1	11/06/08 15:57	GY	4755803
4-Nitrophenol	ND		25	1	11/06/08 15:57	GY	4755803
Acenaphthene	ND		5	1	11/06/08 15:57	GY	4755803
Acenaphthylene	ND		5	1	11/06/08 15:57	GY	4755803
Aniline	ND		5	1	11/06/08 15:57	GY	4755803
Anthracene	ND		5	1	11/06/08 15:57	GY	4755803
Benz(a)anthracene	ND		5	1	11/06/08 15:57	GY	4755803
Benzo(a)pyrene	ND		5	1	11/06/08 15:57	GY	4755803
Benzo(b)fluoranthene	ND		5	1	11/06/08 15:57	GY	4755803
Benzo(g,h,i)perylene	ND		5	1	11/06/08 15:57	GY	4755803
Benzo(k)fluoranthene	ND		5	1	11/06/08 15:57	GY	4755803
Benzoic acid	ND		25	1	11/06/08 15:57	GY	4755803
Benzyl alcohol	ND		5	1	11/06/08 15:57	GY	4755803
Bis(2-chloroethoxy)methane	ND		5	1	11/06/08 15:57	GY	4755803
Bis(2-chloroethyl)ether	ND		5	1	11/06/08 15:57	GY	4755803

Qualifiers:

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

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

Client Sample ID: MW-5 **Collected:** 10/24/2008 9:15 **SPL Sample ID:** 08101614-01

Site: San Juan City, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	11/06/08 15:57	GY	4755803
Bis(2-ethylhexyl)phthalate	ND		5	1	11/06/08 15:57	GY	4755803
Butyl benzyl phthalate	ND		5	1	11/06/08 15:57	GY	4755803
Carbazole	ND		5	1	11/06/08 15:57	GY	4755803
Chrysene	ND		5	1	11/06/08 15:57	GY	4755803
Dibenz(a,h)anthracene	ND		5	1	11/06/08 15:57	GY	4755803
Dibenzofuran	ND		5	1	11/06/08 15:57	GY	4755803
Diethyl phthalate	ND		5	1	11/06/08 15:57	GY	4755803
Dimethyl phthalate	ND		5	1	11/06/08 15:57	GY	4755803
Di-n-butyl phthalate	ND		5	1	11/06/08 15:57	GY	4755803
Di-n-octyl phthalate	ND		5	1	11/06/08 15:57	GY	4755803
Fluoranthene	ND		5	1	11/06/08 15:57	GY	4755803
Fluorene	ND		5	1	11/06/08 15:57	GY	4755803
Hexachlorobenzene	ND		5	1	11/06/08 15:57	GY	4755803
Hexachlorobutadiene	ND		5	1	11/06/08 15:57	GY	4755803
Hexachlorocyclopentadiene	ND		5	1	11/06/08 15:57	GY	4755803
Hexachloroethane	ND		5	1	11/06/08 15:57	GY	4755803
Indeno(1,2,3-cd)pyrene	ND		5	1	11/06/08 15:57	GY	4755803
Isophorone	ND		5	1	11/06/08 15:57	GY	4755803
Naphthalene	ND		5	1	11/06/08 15:57	GY	4755803
Nitrobenzene	ND		5	1	11/06/08 15:57	GY	4755803
N-Nitrosodi-n-propylamine	ND		5	1	11/06/08 15:57	GY	4755803
N-Nitrosodiphenylamine	ND		5	1	11/06/08 15:57	GY	4755803
Pentachlorophenol	ND		25	1	11/06/08 15:57	GY	4755803
Phenanthrene	ND		5	1	11/06/08 15:57	GY	4755803
Phenol	ND		5	1	11/06/08 15:57	GY	4755803
Pyrene	ND		5	1	11/06/08 15:57	GY	4755803
Pyridine	ND		5	1	11/06/08 15:57	GY	4755803
2-Methylphenol	ND		5	1	11/06/08 15:57	GY	4755803
3 & 4-Methylphenol	ND		5	1	11/06/08 15:57	GY	4755803
Surr: 2,4,6-Tribromophenol	82.7		% 10-123	1	11/06/08 15:57	GY	4755803
Surr: 2-Fluorobiphenyl	66.0		% 23-116	1	11/06/08 15:57	GY	4755803
Surr: 2-Fluorophenol	34.7		% 16-110	1	11/06/08 15:57	GY	4755803
Surr: Nitrobenzene-d5	64.0		% 21-114	1	11/06/08 15:57	GY	4755803
Surr: Phenol-d5	24.0		% 10-110	1	11/06/08 15:57	GY	4755803
Surr: Terphenyl-d14	72.0		% 22-141	1	11/06/08 15:57	GY	4755803

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	10/30/2008 16:53	LLL	1.00

Qualifiers:

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

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

Client Sample ID: MW-5 **Collected:** 10/24/2008 9:15 **SPL Sample ID:** 08101614-01

Site: San Juan City, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/L**		
1,1,1,2-Tetrachloroethane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,1,1-Trichloroethane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,1,2,2-Tetrachloroethane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,1,2-Trichloroethane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,1-Dichloroethane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,1-Dichloroethene	ND		5	1	11/01/08 20:48	LU_L	4749656
1,1-Dichloropropene	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2,3-Trichlorobenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2,3-Trichloropropane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2,4-Trichlorobenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2,4-Trimethylbenzene	9		5	1	11/01/08 20:48	LU_L	4749656
1,2-Dibromo-3-chloropropane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2-Dibromoethane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2-Dichlorobenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2-Dichloroethane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2-Dichloropropane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,3,5-Trimethylbenzene	9		5	1	11/01/08 20:48	LU_L	4749656
1,3-Dichlorobenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
1,3-Dichloropropane	ND		5	1	11/01/08 20:48	LU_L	4749656
1,4-Dichlorobenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
2,2-Dichloropropane	ND		5	1	11/01/08 20:48	LU_L	4749656
2-Butanone	ND		20	1	11/01/08 20:48	LU_L	4749656
2-Chloroethyl vinyl ether	ND		10	1	11/01/08 20:48	LU_L	4749656
2-Chlorotoluene	ND		5	1	11/01/08 20:48	LU_L	4749656
2-Hexanone	ND		10	1	11/01/08 20:48	LU_L	4749656
4-Chlorotoluene	ND		5	1	11/01/08 20:48	LU_L	4749656
4-Isopropyltoluene	ND		5	1	11/01/08 20:48	LU_L	4749656
4-Methyl-2-pentanone	ND		10	1	11/01/08 20:48	LU_L	4749656
Acetone	ND		100	1	11/01/08 20:48	LU_L	4749656
Acrylonitrile	ND		50	1	11/01/08 20:48	LU_L	4749656
Benzene	ND		5	1	11/01/08 20:48	LU_L	4749656
Bromobenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
Bromochloromethane	ND		5	1	11/01/08 20:48	LU_L	4749656
Bromodichloromethane	ND		5	1	11/01/08 20:48	LU_L	4749656
Bromoform	ND		5	1	11/01/08 20:48	LU_L	4749656
Bromomethane	ND		10	1	11/01/08 20:48	LU_L	4749656
Carbon disulfide	ND		5	1	11/01/08 20:48	LU_L	4749656
Carbon tetrachloride	ND		5	1	11/01/08 20:48	LU_L	4749656
Chlorobenzene	ND		5	1	11/01/08 20:48	LU_L	4749656

Qualifiers:

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

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

Client Sample ID: MW-5 **Collected:** 10/24/2008 9:15 **SPL Sample ID:** 08101614-01

Site: San Juan City, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	11/01/08 20:48	LU_L	4749656
Chloroform	ND		5	1	11/01/08 20:48	LU_L	4749656
Chloromethane	ND		10	1	11/01/08 20:48	LU_L	4749656
Dibromochloromethane	ND		5	1	11/01/08 20:48	LU_L	4749656
Dibromomethane	ND		5	1	11/01/08 20:48	LU_L	4749656
Dichlorodifluoromethane	ND		10	1	11/01/08 20:48	LU_L	4749656
Ethylbenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
Hexachlorobutadiene	ND		5	1	11/01/08 20:48	LU_L	4749656
Isopropylbenzene	5		5	1	11/01/08 20:48	LU_L	4749656
Methyl tert-butyl ether	ND		5	1	11/01/08 20:48	LU_L	4749656
Methylene chloride	ND		5	1	11/01/08 20:48	LU_L	4749656
Naphthalene	ND		5	1	11/01/08 20:48	LU_L	4749656
n-Butylbenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
n-Propylbenzene	7		5	1	11/01/08 20:48	LU_L	4749656
sec-Butylbenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
Styrene	ND		5	1	11/01/08 20:48	LU_L	4749656
tert-Butylbenzene	ND		5	1	11/01/08 20:48	LU_L	4749656
Tetrachloroethene	ND		5	1	11/01/08 20:48	LU_L	4749656
Toluene	ND		5	1	11/01/08 20:48	LU_L	4749656
Trichloroethene	ND		5	1	11/01/08 20:48	LU_L	4749656
Trichlorofluoromethane	ND		5	1	11/01/08 20:48	LU_L	4749656
Vinyl acetate	ND		10	1	11/01/08 20:48	LU_L	4749656
Vinyl chloride	ND		10	1	11/01/08 20:48	LU_L	4749656
cis-1,2-Dichloroethene	ND		5	1	11/01/08 20:48	LU_L	4749656
cis-1,3-Dichloropropene	ND		5	1	11/01/08 20:48	LU_L	4749656
m,p-Xylene	ND		5	1	11/01/08 20:48	LU_L	4749656
o-Xylene	ND		5	1	11/01/08 20:48	LU_L	4749656
trans-1,2-Dichloroethene	ND		5	1	11/01/08 20:48	LU_L	4749656
trans-1,3-Dichloropropene	ND		5	1	11/01/08 20:48	LU_L	4749656
1,2-Dichloroethene (total)	ND		5	1	11/01/08 20:48	LU_L	4749656
Xylenes,Total	ND		5	1	11/01/08 20:48	LU_L	4749656
Surr: 1,2-Dichloroethane-d4	106		% 62-130	1	11/01/08 20:48	LU_L	4749656
Surr: 4-Bromofluorobenzene	102		% 70-130	1	11/01/08 20:48	LU_L	4749656
Surr: Toluene-d8	104		% 74-122	1	11/01/08 20:48	LU_L	4749656

Qualifiers:

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

Quality Control Documentation

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

Quality Control Report

Conoco Phillips
COP Scott Drake No 1

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 08101614
Lab Batch ID: 84920

Method Blank

RunID: HP_Z_081106A-4757246 Units: mg/L
Analysis Date: 11/06/2008 14:26 Analyst: NW
Preparation Date: 10/29/2008 18:43 Prep By: N_M Method: SW3510C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01C	MW-5

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	0.10
Surr: n-Pentacosane	57.8	20-150

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

RunID: HP_Z_081106A-4757247 Units: mg/L
Analysis Date: 11/06/2008 14:48 Analyst: NW
Preparation Date: 10/29/2008 18:43 Prep By: N_M Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	2.00	1.90	94.9	2.00	2.07	104	8.8	20	21	130
Surr: n-Pentacosane	0.0500	0.0443	88.6	0.0500	0.0478	95.6	7.6	30	20	150

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

COP Scott Drake No 1

Analysis: Gasoline Range Organics
Method: SW8015B
WorkOrder: 08101614
Lab Batch ID: R255843

Method Blank

RunID: HP_P_081103A-4749727 Units: mg/L
Analysis Date: 11/03/2008 17:55 Analyst: WLV
Preparation Date: 11/03/2008 17:55 Prep By: Method: SW5030B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01B	MW-5

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	90.8	60-155
Surr: 4-Bromofluorobenzene	103.7	50-158

Laboratory Control Sample (LCS)

RunID: HP_P_081103A-4749736 Units: mg/L
Analysis Date: 11/03/2008 22:40 Analyst: WLV
Preparation Date: 11/03/2008 22:40 Prep By: Method: SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	1.05	105	42	136
Surr: 1,4-Difluorobenzene	0.100	0.0943	94.3	60	155
Surr: 4-Bromofluorobenzene	0.100	0.106	106	50	158

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

Sample Spiked: 08101530-02
RunID: HP_P_081103A-4749733 Units: mg/L
Analysis Date: 11/03/2008 21:15 Analyst: WLV

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	1.07	1	1.17	10.2 *	1	1.17	10.6 *	0.359	36	22	174
Surr: 1,4-Difluorobenzene	ND	0.1	0.0993	99.3	0.1	0.104	104	4.82	30	60	155
Surr: 4-Bromofluorobenzene	ND	0.1	0.112	112	0.1	0.112	112	0.268	30	50	158

Qualifiers:

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

COP Scott Drake No 1

Analysis: Metals by Method 6010B, Total
Method: SW6010B
WorkOrder: 08101614
Lab Batch ID: 84958

Method Blank

RunID: TJA_081031A-4745434 Units: mg/L
Analysis Date: 10/31/2008 12:49 Analyst: S_C
Preparation Date: 10/30/2008 15:30 Prep By: BDG Method: SW3010A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01F	MW-5

Analyte	Result	Rep Limit
Calcium	ND	0.1
Iron	ND	0.02
Magnesium	ND	0.1
Manganese	ND	0.005
Sodium	ND	0.5

Laboratory Control Sample (LCS)

RunID: TJA_081031A-4745435 Units: mg/L
Analysis Date: 10/31/2008 12:54 Analyst: S_C
Preparation Date: 10/30/2008 15:30 Prep By: BDG Method: SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Calcium	1.000	1.149	114.9	80	120
Iron	1.000	1.125	112.5	80	120
Magnesium	1.000	1.122	112.2	80	120
Manganese	1.000	1.121	112.1	80	120
Sodium	1.000	1.008	100.8	80	120

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

Sample Spiked: 08101602-02
RunID: TJA_081031A-4745440 Units: mg/L
Analysis Date: 10/31/2008 13:17 Analyst: S_C

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Iron	0.542	1	1.563	102.1	1	1.466	92.47	6.375	20	75	125

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

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips
COP Scott Drake No 1

Analysis: Metals by Method 6010B, Total
Method: SW6010B
WorkOrder: 08101614
Lab Batch ID: 84958

Sample Spiked: 08101602-02
RunID: TJA_081031A-4745437 Units: mg/L
Analysis Date: 10/31/2008 13:03 Analyst: S_C
Preparation Date: 10/30/2008 15:30 Prep By: BDG Method: SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Calcium	406.3	1	403.5	N/C	1	447.5	N/C	N/C	20	75	125
Iron	0.5418	1	1.504	96.23	1	2.372	183.0 *	44.78 *	20	75	125
Magnesium	45.32	1	46.01	N/C	1	48.67	N/C	N/C	20	75	125
Manganese	1.428	1	2.398	96.93	1	2.557	112.8	6.415	20	75	125
Sodium	81.33	1	81.57	N/C	1	83.01	N/C	N/C	20	75	125

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

COP Scott Drake No 1

Analysis: Metals by Method 6020A, Total
Method: SW6020A
WorkOrder: 08101614
Lab Batch ID: 84958-I

Method Blank

RunID: ICPMS2_081031A-4745588 Units: mg/L
Analysis Date: 10/31/2008 14:46 Analyst: AL_H
Preparation Date: 10/30/2008 15:30 Prep By: BDG Method: SW3010A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01F	MW-5

Analyte	Result	Rep Limit
Arsenic	ND	0.005
Barium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.005
Lead	ND	0.005
Selenium	ND	0.005
Silver	ND	0.005

Laboratory Control Sample (LCS)

RunID: ICPMS2_081031A-4745595 Units: mg/L
Analysis Date: 10/31/2008 15:06 Analyst: AL_H
Preparation Date: 10/30/2008 15:30 Prep By: BDG Method: SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	0.1000	0.09881	98.81	80	120
Barium	0.1000	0.09559	95.59	80	120
Cadmium	0.1000	0.1016	101.6	80	120
Chromium	0.1000	0.09065	90.65	80	120
Lead	0.1000	0.08910	89.10	80	120
Selenium	0.1000	0.1006	100.6	80	120
Silver	0.1000	0.1157	115.7	80	120

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

Sample Spiked: 08101602-02
RunID: ICPMS2_081031A-4745597 Units: mg/L
Analysis Date: 10/31/2008 15:12 Analyst: AL_H
Preparation Date: 10/30/2008 15:30 Prep By: BDG Method: SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Arsenic	ND	0.1	0.1013	97.62	0.1	0.1022	98.52	0.8845	20	75	125

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips
COP Scott Drake No 1

Analysis: Metals by Method 6020A, Total
Method: SW6020A
WorkOrder: 08101614
Lab Batch ID: 84958-I

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

Sample Spiked: 08101602-02
RunID: ICPMS2_081031A-4745597 Units: mg/L
Analysis Date: 10/31/2008 15:12 Analyst: AL_H
Preparation Date: 10/30/2008 15:30 Prep By: BDG Method: SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Barium	0.05154	0.1	0.1599	108.4	0.1	0.1574	105.9	1.576	20	75	125
Cadmium	ND	0.1	0.09856	98.56	0.1	0.09554	95.54	3.112	20	75	125
Chromium	ND	0.1	0.09150	91.50	0.1	0.09256	92.56	1.152	20	75	125
Lead	ND	0.1	0.09164	91.64	0.1	0.09132	91.32	0.3498	20	75	125
Selenium	ND	0.1	0.09221	92.21	0.1	0.09133	91.33	0.9589	20	75	125
Silver	ND	0.1	0.1145	114.5	0.1	0.1127	112.7	1.585	20	75	125

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

COP Scott Drake No 1

Analysis: Mercury, Total
Method: SW7470A

WorkOrder: 08101614
Lab Batch ID: 85178

Method Blank

RunID: HGLC_081106A-4755670 Units: mg/L
Analysis Date: 11/06/2008 13:32 Analyst: F_S
Preparation Date: 11/06/2008 13:18 Prep By: F_S Method: SW7470A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01F	MW-5

Analyte	Result	Rep Limit
Mercury	ND	0.0002

Laboratory Control Sample (LCS)

RunID: HGLC_081106A-4755671 Units: mg/L
Analysis Date: 11/06/2008 13:35 Analyst: F_S
Preparation Date: 11/06/2008 13:18 Prep By: F_S Method: SW7470A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001983	99.15	80	120

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

Sample Spiked: 08101734-09
RunID: HGLC_081106A-4755673 Units: mg/L
Analysis Date: 11/06/2008 13:39 Analyst: F_S
Preparation Date: 11/06/2008 13:18 Prep By: F_S Method: SW7470A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	ND	0.002	0.001885	94.26	0.002	0.001843	92.14	2.266	20	75	125

Qualifiers:

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

COP Scott Drake No 1

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 08101614
Lab Batch ID: 84949

Method Blank

RunID: H_081106B-4755273 Units: ug/L
Analysis Date: 11/06/2008 10:56 Analyst: GY
Preparation Date: 10/30/2008 16:53 Prep By: LLL Method: SW3510C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01D	MW-5

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

Qualifiers:

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

COP Scott Drake No 1

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 08101614
Lab Batch ID: 84949

Method Blank

RunID: H_081106B-4755273 Units: ug/L
Analysis Date: 11/06/2008 10:56 Analyst: GY
Preparation Date: 10/30/2008 16:53 Prep By: LLL Method: SW3510C

Analyte	Result	Rep Limit
Diethyl phthalate	ND	5.0
Dimethyl phthalate	ND	5.0
Di-n-butyl phthalate	ND	5.0
Di-n-octyl phthalate	ND	5.0
Fluoranthene	ND	5.0
Fluorene	ND	5.0
Hexachlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Hexachlorocyclopentadiene	ND	5.0
Hexachloroethane	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Isophorone	ND	5.0
Naphthalene	ND	5.0
Nitrobenzene	ND	5.0
N-Nitrosodi-n-propylamine	ND	5.0
N-Nitrosodiphenylamine	ND	5.0
Pentachlorophenol	ND	25
Phenanthrene	ND	5.0
Phenol	ND	5.0
Pyrene	ND	5.0
Pyridine	ND	5.0
2-Methylphenol	ND	5.0
3 & 4-Methylphenol	ND	5.0
Surr: 2,4,6-Tribromophenol	76.0	10-123
Surr: 2-Fluorobiphenyl	82.0	23-116
Surr: 2-Fluorophenol	78.7	16-110
Surr: Nitrobenzene-d5	76.0	21-114
Surr: Phenol-d5	85.3	10-110
Surr: Terphenyl-d14	80.0	22-141

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

RunID: H_081106B-4755274 Units: ug/L
Analysis Date: 11/06/2008 11:26 Analyst: GY
Preparation Date: 10/30/2008 16:53 Prep By: LLL Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	25.0	19.0	76.0	25.0	20.0	80.0	5.1	39	21	120
1,2-Dichlorobenzene	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	20	150

Qualifiers:

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

COP Scott Drake No 1

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 08101614
Lab Batch ID: 84949

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

RunID: H_081106B-4755274 Units: ug/L
Analysis Date: 11/06/2008 11:26 Analyst: GY
Preparation Date: 10/30/2008 16:53 Prep By: LLL Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	25.0	18.0	72.0	25.0	19.0	76.0	5.4	50	10	251
1,3-Dichlorobenzene	25.0	19.0	76.0	25.0	20.0	80.0	5.1	50	20	150
1,4-Dichlorobenzene	25.0	20.0	80.0	25.0	20.0	80.0	0.0	45	20	150
2,4,5-Trichlorophenol	25.0	20.0	80.0	25.0	23.0	92.0	14.0	50	30	150
2,4,6-Trichlorophenol	25.0	20.0	80.0	25.0	22.0	88.0	9.5	50	30	150
2,4-Dichlorophenol	25.0	20.0	80.0	25.0	21.0	84.0	4.9	50	30	150
2,4-Dimethylphenol	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	32	140
2,4-Dinitrophenol	25.0	14.0	56.0	25.0	15.0	60.0	6.9	50	10	160
2,4-Dinitrotoluene	25.0	22.0	88.0	25.0	24.0	96.0	8.7	50	30	150
2,6-Dinitrotoluene	25.0	20.0	80.0	25.0	23.0	92.0	14.0	50	30	150
2-Chloronaphthalene	25.0	22.0	88.0	25.0	24.0	96.0	8.7	50	30	150
2-Chlorophenol	25.0	21.0	84.0	25.0	22.0	88.0	4.7	40	23	134
2-Methylnaphthalene	25.0	22.0	88.0	25.0	23.0	92.0	4.4	50	20	170
2-Nitroaniline	25.0	22.0	88.0	25.0	24.0	96.0	8.7	50	20	160
2-Nitrophenol	25.0	19.0	76.0	25.0	22.0	88.0	14.6	50	29	182
3,3'-Dichlorobenzidine	25.0	19.0	76.0	25.0	20.0	80.0	5.1	50	30	200
3-Nitroaniline	25.0	19.0	76.0	25.0	22.0	88.0	14.6	50	20	160
4,6-Dinitro-2-methylphenol	25.0	17.0	68.0	25.0	18.0	72.0	5.7	50	10	160
4-Bromophenyl phenyl ether	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	150
4-Chloro-3-methylphenol	25.0	20.0	80.0	25.0	22.0	88.0	9.5	42	25	160
4-Chloroaniline	25.0	21.0	84.0	25.0	23.0	92.0	9.1	50	20	160
4-Chlorophenyl phenyl ether	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	25	158
4-Nitroaniline	25.0	20.0	80.0	25.0	24.0	96.0	18.2	50	20	160
4-Nitrophenol	25.0	18.0	72.0	25.0	20.0	80.0	10.5	50	10	132
Acenaphthene	25.0	21.0	84.0	25.0	22.0	88.0	4.7	31	30	150
Acenaphthylene	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	33	250
Aniline	50.0	41.0	82.0	50.0	44.0	88.0	7.1	50	10	135
Anthracene	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	27	133
Benz(a)anthracene	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	33	143
Benzo(a)pyrene	25.0	19.0	76.0	25.0	20.0	80.0	5.1	50	17	163
Benzo(b)fluoranthene	25.0	20.0	80.0	25.0	22.0	88.0	9.5	50	24	159
Benzo(g,h,i)perylene	25.0	22.0	88.0	25.0	23.0	92.0	4.4	50	30	160
Benzo(k)fluoranthene	25.0	23.0	92.0	25.0	22.0	88.0	4.4	50	11	162

Qualifiers:

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

COP Scott Drake No 1

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 08101614
Lab Batch ID: 84949

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

RunID: H_081106B-4755274 Units: ug/L
Analysis Date: 11/06/2008 11:26 Analyst: GY
Preparation Date: 10/30/2008 16:53 Prep By: LLL Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Benzoic acid	25.0	40.0	160	25.0	40.0	160	0.0	50	10	400
Benzyl alcohol	25.0	19.0	76.0	25.0	20.0	80.0	5.1	50	30	160
Bis(2-chloroethoxy)methane	25.0	33.0	132	25.0	36.0	144	8.7	50	33	184
Bis(2-chloroethyl)ether	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	12	158
Bis(2-chloroisopropyl)ether	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	20	160
Bis(2-ethylhexyl)phthalate	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	10	158
Butyl benzyl phthalate	25.0	22.0	88.0	25.0	23.0	92.0	4.4	50	30	160
Carbazole	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	30	150
Chrysene	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	17	168
Dibenz(a,h)anthracene	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	160
Dibenzofuran	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	30	150
Diethyl phthalate	25.0	21.0	84.0	25.0	23.0	92.0	9.1	50	30	160
Dimethyl phthalate	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	30	160
Di-n-butyl phthalate	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	30	160
Di-n-octyl phthalate	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	20	150
Fluoranthene	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	26	137
Fluorene	25.0	21.0	84.0	25.0	23.0	92.0	9.1	50	30	150
Hexachlorobenzene	25.0	20.0	80.0	25.0	21.0	84.0	4.9	50	20	150
Hexachlorobutadiene	25.0	19.0	76.0	25.0	20.0	80.0	5.1	50	20	140
Hexachlorocyclopentadiene	25.0	17.0	68.0	25.0	18.0	72.0	5.7	50	10	150
Hexachloroethane	25.0	19.0	76.0	25.0	20.0	80.0	5.1	50	14	120
Indeno(1,2,3-cd)pyrene	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	30	160
Isophorone	25.0	22.0	88.0	25.0	24.0	96.0	8.7	50	21	196
Naphthalene	25.0	20.0	80.0	25.0	21.0	84.0	4.9	50	21	133
Nitrobenzene	25.0	20.0	80.0	25.0	21.0	84.0	4.9	50	20	160
N-Nitrosodi-n-propylamine	25.0	22.0	88.0	25.0	23.0	92.0	4.4	38	30	160
N-Nitrosodiphenylamine	50.0	51.0	102	50.0	52.0	104	1.9	50	30	150
Pentachlorophenol	25.0	14.0	56.0	25.0	15.0	60.0	6.9	50	14	176
Phenanthrene	25.0	20.0	80.0	25.0	21.0	84.0	4.9	50	10	140
Phenol	25.0	21.0	84.0	25.0	23.0	92.0	9.1	42	40	132
Pyrene	25.0	22.0	88.0	25.0	22.0	88.0	0.0	38	30	150
Pyridine	50.0	35.0	70.0	50.0	34.0	68.0	2.9	50	10	150
2-Methylphenol	25.0	21.0	84.0	25.0	23.0	92.0	9.1	50	30	160

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 08101614
Lab Batch ID: 84949

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

RunID: H_081106B-4755274 Units: ug/L
Analysis Date: 11/06/2008 11:26 Analyst: GY
Preparation Date: 10/30/2008 16:53 Prep By: LLL Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
3 & 4-Methylphenol	25.0	19.0	76.0	25.0	21.0	84.0	10.0	50	10	160
Surr: 2,4,6-Tribromophenol	75.0	64.0	85.3	75.0	70.0	93.3	9.0	30	10	123
Surr: 2-Fluorobiphenyl	50.0	42.0	84.0	50.0	41.0	82.0	2.4	30	23	116
Surr: 2-Fluorophenol	75.0	62.0	82.7	75.0	65.0	86.7	4.7	30	16	110
Surr: Nitrobenzene-d5	50.0	40.0	80.0	50.0	42.0	84.0	4.9	30	21	114
Surr: Phenol-d5	75.0	65.0	86.7	75.0	69.0	92.0	6.0	30	10	110
Surr: Terphenyl-d14	50.0	42.0	84.0	50.0	42.0	84.0	0.0	30	22	141

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 08101614
Lab Batch ID: R255859

Method Blank

RunID: L_081101C-4749652 Units: ug/L
Analysis Date: 11/01/2008 12:40 Analyst: LU_L
Preparation Date: 11/01/2008 12:40 Prep By: Method:

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01A	MW-5

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

Qualifiers:

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

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 08101614
Lab Batch ID: R255859

Method Blank

RunID: L_081101C-4749652 Units: ug/L
Analysis Date: 11/01/2008 12:40 Analyst: LU_L
Preparation Date: 11/01/2008 12:40 Prep By: Method:

Analyte	Result	Rep Limit
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
Methyl tert-butyl ether	ND	5.0
Methylene chloride	ND	5.0
Naphthalene	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl acetate	ND	10
Vinyl chloride	ND	10
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,2-Dichloroethene (total)	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	104.0	62-130
Surr: 4-Bromofluorobenzene	100.0	70-130
Surr: Toluene-d8	104.0	74-122

Laboratory Control Sample (LCS)

RunID: L_081101C-4749651 Units: ug/L
Analysis Date: 11/01/2008 12:13 Analyst: LU_L
Preparation Date: 11/01/2008 12:13 Prep By: Method:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	20.0	100	71	136
1,1,1-Trichloroethane	20.0	19.0	95.0	66	132
1,1,2,2-Tetrachloroethane	20.0	24.0	120	55	139
1,1,2-Trichloroethane	20.0	24.0	120	70	130
1,1-Dichloroethane	20.0	23.0	115	67	131

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 08101614
Lab Batch ID: R255859

Laboratory Control Sample (LCS)

RunID: L_081101C-4749651 Units: ug/L
Analysis Date: 11/01/2008 12:13 Analyst: LU_L
Preparation Date: 11/01/2008 12:13 Prep By: Method:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	21.0	105	71	146
1,1-Dichloropropene	20.0	22.0	110	59	138
1,2,3-Trichlorobenzene	20.0	21.0	105	37	155
1,2,3-Trichloropropane	20.0	24.0	120	70	145
1,2,4-Trichlorobenzene	20.0	22.0	110	39	133
1,2,4-Trimethylbenzene	20.0	21.0	105	53	147
1,2-Dibromo-3-chloropropane	20.0	24.0	120	43	137
1,2-Dibromoethane	20.0	22.0	110	63	126
1,2-Dichlorobenzene	20.0	22.0	110	70	130
1,2-Dichloroethane	20.0	21.0	105	64	150
1,2-Dichloropropane	20.0	23.0	115	76	124
1,3,5-Trimethylbenzene	20.0	21.0	105	57	146
1,3-Dichlorobenzene	20.0	22.0	110	72	134
1,3-Dichloropropane	20.0	23.0	115	78	130
1,4-Dichlorobenzene	20.0	22.0	110	70	130
2,2-Dichloropropane	20.0	17.0	85.0	45	156
2-Butanone	120	220	183	20	235
2-Chloroethyl vinyl ether	20.0	19.0	95.0	13	179
2-Chlorotoluene	20.0	21.0	105	64	122
2-Hexanone	20.0	29.0	145	34	182
4-Chlorotoluene	20.0	22.0	110	64	142
4-Isopropyltoluene	20.0	22.0	110	60	134
4-Methyl-2-pentanone	20.0	22.0	110	11	145
Acetone	200	490	245	13	386
Acrylonitrile	100	130	130	43	194
Benzene	20.0	22.0	110	76	126
Bromobenzene	20.0	22.0	110	70	130
Bromochloromethane	20.0	23.0	115	63	131
Bromodichloromethane	20.0	22.0	110	77	138
Bromoform	20.0	17.0	85.0	55	129
Bromomethane	20.0	21.0	105	58	148
Carbon disulfide	20.0	18.0	90.0	46	146
Carbon tetrachloride	20.0	17.0	85.0	66	137
Chlorobenzene	20.0	22.0	110	67	136

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 08101614
Lab Batch ID: R255859

Laboratory Control Sample (LCS)

RunID: L_081101C-4749651 Units: ug/L
Analysis Date: 11/01/2008 12:13 Analyst: LU_L
Preparation Date: 11/01/2008 12:13 Prep By: Method:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	22.0	110	50	137
Chloroform	20.0	23.0	115	70	135
Chloromethane	20.0	19.0	95.0	51	140
Dibromochloromethane	20.0	19.0	95.0	69	127
Dibromomethane	20.0	22.0	110	74	130
Dichlorodifluoromethane	20.0	19.0	95.0	32	161
Ethylbenzene	20.0	22.0	110	67	122
Hexachlorobutadiene	20.0	22.0	110	43	144
Isopropylbenzene	20.0	19.0	95.0	60	135
Methyl tert-butyl ether	40.0	41.0	102	48	160
Methylene chloride	20.0	22.0	110	52	143
Naphthalene	20.0	21.0	105	24	150
n-Butylbenzene	20.0	22.0	110	50	140
n-Propylbenzene	20.0	21.0	105	62	137
sec-Butylbenzene	20.0	22.0	110	66	126
Styrene	20.0	21.0	105	60	139
tert-Butylbenzene	20.0	21.0	105	67	140
Tetrachloroethene	20.0	21.0	105	26	200
Toluene	20.0	22.0	110	70	131
Trichloroethene	20.0	21.0	105	64	137
Trichlorofluoromethane	20.0	21.0	105	46	167
Vinyl acetate	20.0	24.0	120	10	193
Vinyl chloride	20.0	26.0	130	31	147
cis-1,2-Dichloroethene	20.0	23.0	115	70	142
cis-1,3-Dichloropropene	20.0	21.0	105	61	134
m,p-Xylene	40.0	47.0	118	72	150
o-Xylene	20.0	22.0	110	78	141
trans-1,2-Dichloroethene	20.0	23.0	115	67	141
trans-1,3-Dichloropropene	20.0	19.0	95.0	56	136
1,2-Dichloroethene (total)	40	46	120	73	139
Xylenes,Total	60	69	120	72	150
Surr: 1,2-Dichloroethane-d4	50.0	52	104	62	130
Surr: 4-Bromofluorobenzene	50.0	51	102	70	130
Surr: Toluene-d8	50.0	52	104	74	122

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 08101614
Lab Batch ID: R255859

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

Sample Spiked: 08101352-02
RunID: L_081101C-4749654 Units: ug/L
Analysis Date: 11/01/2008 14:56 Analyst: LU_L

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1,2-Tetrachloroethane	ND	20	19.0	95.0	20	18.0	90.0	5.41	20	35	175
1,1,1-Trichloroethane	ND	20	16.0	80.0	20	16.0	80.0	0	20	35	175
1,1,2,2-Tetrachloroethane	ND	20	17.0	85.0	20	18.0	90.0	5.71	20	35	175
1,1,2-Trichloroethane	ND	20	21.0	105	20	21.0	105	0	20	35	175
1,1-Dichloroethane	ND	20	19.0	95.0	20	20.0	100	5.13	20	35	175
1,1-Dichloroethene	ND	20	18.0	90.0	20	20.0	100	10.5	22	61	145
1,1-Dichloropropene	ND	20	18.0	90.0	20	20.0	100	10.5	20	35	175
1,2,3-Trichlorobenzene	ND	20	17.0	85.0	20	18.0	90.0	5.71	20	27	187
1,2,3-Trichloropropane	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
1,2,4-Trichlorobenzene	ND	20	18.0	90.0	20	18.0	90.0	0	20	34	150
1,2,4-Trimethylbenzene	ND	20	18.0	90.0	20	19.0	95.0	5.41	20	35	175
1,2-Dibromo-3-chloropropane	ND	20	19.0	95.0	20	19.0	95.0	0	20	15	175
1,2-Dibromoethane	ND	20	20.0	100	20	20.0	100	0	20	35	175
1,2-Dichlorobenzene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
1,2-Dichloroethane	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
1,2-Dichloropropane	ND	20	19.0	95.0	20	20.0	100	5.13	20	35	175
1,3,5-Trimethylbenzene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
1,3-Dichlorobenzene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
1,3-Dichloropropane	ND	20	20.0	100	20	21.0	105	4.88	20	35	175
1,4-Dichlorobenzene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
2,2-Dichloropropane	ND	20	13.0	65.0	20	14.0	70.0	7.41	20	35	175
2-Butanone	ND	20	32.0	160	20	32.0	160	0	20	10	230
2-Chloroethyl vinyl ether	ND	20	0	0 *	20	0	0 *	0	20	10	250
2-Chlorotoluene	ND	20	19.0	95.0	20	19.0	95.0	0	20	31	175
2-Hexanone	ND	20	15.0	75.0	20	18.0	90.0	18.2	20	10	250
4-Chlorotoluene	ND	20	19.0	95.0	20	20.0	100	5.13	20	31	175
4-Isopropyltoluene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
4-Methyl-2-pentanone	ND	20	16.0	80.0	20	18.0	90.0	11.8	20	10	175
Acetone	ND	100	99.0	99.0	100	110	110	10.5	20	10	400
Acrylonitrile	ND	200	190	95.0	200	210	105	10.0	20	15	250

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 08101614
Lab Batch ID: R255859

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

Sample Spiked: 08101352-02
RunID: L_081101C-4749654 Units: ug/L
Analysis Date: 11/01/2008 14:56 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	ND	20	19.0	95.0	20	20.0	100	5.13	22	76	127
Bromobenzene	ND	20	20.0	100	20	20.0	100	0	20	35	175
Bromochloromethane	ND	20	21.0	105	20	22.0	110	4.65	20	35	175
Bromodichloromethane	ND	20	18.0	90.0	20	19.0	95.0	5.41	20	35	175
Bromoform	ND	20	16.0	80.0	20	16.0	80.0	0	20	35	175
Bromomethane	ND	20	19.0	95.0	20	20.0	100	5.13	20	35	175
Carbon disulfide	ND	20	16.0	80.0	20	18.0	90.0	11.8	20	30	225
Carbon tetrachloride	ND	20	16.0	80.0	20	16.0	80.0	0	20	35	175
Chlorobenzene	ND	20	20.0	100	20	19.0	95.0	5.13	21	70	130
Chloroethane	ND	20	20.0	100	20	21.0	105	4.88	20	35	175
Chloroform	ND	20	20.0	100	20	21.0	105	4.88	20	35	175
Chloromethane	ND	20	17.0	85.0	20	18.0	90.0	5.71	20	35	175
Dibromochloromethane	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
Dibromomethane	ND	20	20.0	100	20	20.0	100	0	20	35	175
Dichlorodifluoromethane	ND	20	13.0	65.0	20	15.0	75.0	14.3	20	35	175
Ethylbenzene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
Hexachlorobutadiene	ND	20	18.0	90.0	20	18.0	90.0	0	20	43	144
Isopropylbenzene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
Methyl tert-butyl ether	ND	20	17.0	85.0	20	18.0	90.0	5.71	20	35	175
Methylene chloride	ND	20	19.0	95.0	20	20.0	100	5.13	20	35	175
Naphthalene	ND	20	17.0	85.0	20	18.0	90.0	5.71	20	20	210
n-Butylbenzene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
n-Propylbenzene	ND	20	18.0	90.0	20	19.0	95.0	5.41	20	35	175
sec-Butylbenzene	ND	20	18.0	90.0	20	19.0	95.0	5.41	20	35	175
Styrene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
tert-Butylbenzene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
Tetrachloroethene	ND	20	20.0	100	20	18.0	90.0	10.5	20	30	250
Toluene	ND	20	21.0	105	20	21.0	105	0	24	70	131
Trichloroethene	ND	20	20.0	100	20	19.0	95.0	5.13	21	60	140
Trichlorofluoromethane	ND	20	17.0	85.0	20	16.0	80.0	6.06	20	17	250
Vinyl acetate	ND	20	17.0	85.0	20	19.0	95.0	11.1	20	10	250
Vinyl chloride	ND	20	24.0	120	20	25.0	125	4.08	20	35	175

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 08101614
Lab Batch ID: R255859

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

Sample Spiked: 08101352-02
RunID: L_081101C-4749654 Units: ug/L
Analysis Date: 11/01/2008 14:56 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
cis-1,2-Dichloroethene	ND	20	20.0	100	20	21.0	105	4.88	20	35	175
cis-1,3-Dichloropropene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
m,p-Xylene	ND	40	40.0	100	40	39.0	97.5	2.53	20	35	175
o-Xylene	ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
trans-1,2-Dichloroethene	ND	20	19.0	95.0	20	20.0	100	5.13	20	35	175
trans-1,3-Dichloropropene	ND	20	16.0	80.0	20	17.0	85.0	6.06	20	35	175
1,2-Dichloroethene (total)	ND	40	39	98	40	41	100	5.0	20	35	175
Xylenes,Total	ND	60	60	100	60	58	97	3.4	20	35	175
Surr: 1,2-Dichloroethane-d4	ND	50	50	100	50	52.0	104	3.92	30	62	130
Surr: 4-Bromofluorobenzene	ND	50	52	104	50	51.0	102	1.94	30	70	130
Surr: Toluene-d8	ND	50	53	106	50	52.0	104	1.90	30	74	122

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Nitrate Nitrogen (as N), Total
Method: E353.2
WorkOrder: 08101614
Lab Batch ID: R256285A

Method Blank

RunID: WET_081103ZD-4757587 Units: mg/L
Analysis Date: 11/03/2008 15:17 Analyst: TW

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01E	MW-5

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

Laboratory Control Sample (LCS)

RunID: WET_081103ZD-4757590 Units: mg/L
Analysis Date: 11/03/2008 15:17 Analyst: TW

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	5.000	5.372	107.4	90	110

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

Sample Spiked: 08101626-01
RunID: WET_081103ZD-4757607 Units: mg/L
Analysis Date: 11/03/2008 15:17 Analyst: TW

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Nitrogen,Nitrate (As N)	ND	5	4.471	89.43 *	5	4.920	98.39	9.548	20	90	110

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 08101614
Lab Batch ID: R256813A

Method Blank

RunID: IC1_081110B-4766069 Units: mg/L
Analysis Date: 11/10/2008 16:35 Analyst: TW

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01E	MW-5

Analyte	Result	Rep Limit
Chloride	ND	0.50
Fluoride	ND	0.50

Laboratory Control Sample (LCS)

RunID: IC1_081110B-4766017 Units: mg/L
Analysis Date: 11/10/2008 16:51 Analyst: TW

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	9.409	94.09	85	115
Fluoride	10.00	10.03	100.3	85	115

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

Sample Spiked: 08101597-01
RunID: IC1_081110B-4766020 Units: mg/L
Analysis Date: 11/10/2008 18:20 Analyst: TW

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	18.90	40	58.79	99.73	40	56.56	94.14	3.874	20	80	120
Fluoride	ND	40	40.16	98.60	40	38.85	95.32	3.324	20	80	120

Qualifiers:

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

COP Scott Drake No 1

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 08101614
Lab Batch ID: R256827

Method Blank

RunID: IC1_081111A-4766432 Units: mg/L
Analysis Date: 11/11/2008 10:53 Analyst: TW

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01E	MW-5

Analyte	Result	Rep Limit
Sulfate	ND	0.50

Laboratory Control Sample (LCS)

RunID: IC1_081111A-4766433 Units: mg/L
Analysis Date: 11/11/2008 11:10 Analyst: TW

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfate	10.00	9.448	94.48	85	115

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

Sample Spiked: 08101597-01
RunID: IC1_081111A-4766437 Units: mg/L
Analysis Date: 11/11/2008 12:16 Analyst: TW

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfate	1482	1000	2451	96.96	1000	2461	97.94	0.4013	20	80	120

Qualifiers:

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

COP Scott Drake No 1

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 08101614
Lab Batch ID: R257651A

Method Blank

RunID: IC1_081119A-4780752 Units: mg/L
Analysis Date: 11/19/2008 18:44 Analyst: TW

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08101614-01E	MW-5

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

Laboratory Control Sample (LCS)

RunID: IC1_081119A-4780753 Units: mg/L
Analysis Date: 11/19/2008 19:01 Analyst: TW

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Ortho-phosphate (As P)	10.00	9.167	91.67	85	115

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

Sample Spiked: 08101597-01
RunID: IC1_081119A-4780767 Units: mg/L
Analysis Date: 11/20/2008 5:09 Analyst: TW

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Ortho-phosphate (As P)	ND	100	101.9	101.9	100	100.9	100.9	0.9614	20	80	120

Qualifiers:

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

Sample Receipt Checklist

And

Chain of Custody

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

Sample Receipt Checklist

Workorder:	**08101614**	Received By:	**RE**
Date and Time Received:	**10/28/2008 9:30:00 AM**	Carrier name:	**Fedex-Priority**
Temperature:	**4.0°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?**	Yes	☑	No	☐	
8.	**Sample containers intact?**	Yes	☑	No	☐	
9.	**Sufficient sample volume for indicated test?**	Yes	☑	No	☐	
10.	**All samples received within holding time?** 1.Received all Nitrates and Ortho-PO4 expired collected on 10/24/08.	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: Elder, Allen **Contact Date & Time:** 10/29/2004 3:00:00 PM

Client Name Contacted: Kelley Blanchard

Non Conformance Issues: Continue with Nitrate and Ortho-PO4 per historicals..

Client Instructions: Notified client via email of expirations and that we will proceed per historicals.

Chain of Custody Record

Client: Tetra Tech/ Conoco Phillips

SPL Workorder Number: 0810614

Attention: Kelly Blanchard/Tetra Tech

Phone: 505-237-8440 | email: kelly.blanchard@tetratech.c

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque | State: NM | Zip Code: 87110

Project Name: ~~South Drake #1~~ Scott Drake #1

P.O. Number:

Sampled By: Signature: Kelly E Blanchard print: Kelly E. Blanchard

Sample ID	Collected Date	Collected Time	Sample Type Comp	Sample Type Grab	Matrix Water	Matrix Soil	Bottle Type	Preservative Type	# of Containers	~~8260-BTEX~~	Requested Analysis 8015-GRO	8015-DRO	8260-VOC	8270-SVOC	Tot.Metals&Hg-6010/7470	Tot.Metals-6020/7471 ✓	~~Anions~~ Anions
MW-3	10-24	9:15		✓	✓		1	3	3				X				
MW-3	10-24	9:15		✓	✓		1	3	3		X						
MW-3	10-24	9:15		✓	✓		4	3	1			X					
MW-3	10-24	9:15		✓	✓		4	1	1					X			
MW-3	10-24	9:15		✓	✓		3	1	2								X
MW-3	10-24	9:15		✓	✓		6	2	2						X	X	

Turnaround Time Requirements
24 hr( ) 48 hr( )
72 hr( ) 5 wday( )
10 wday - Standard(✓)

Remarks: Anions=Fl,Cl,N,PO4,SO4

Intact? Y or N
Temperature: 4.0c

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

Preservative Types: 1: NONE 2. HNO3 3. HCL 4. H2SO4 * 6.) 16 oz plastic

Relinquished by Sampler:	Date	Time	Received by:
Kelly E Blanchard	10-27-08	1500	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by SPL, Inc.
	10/28/08	0930	

Page ___ of ___

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

Conoco Phillips

Certificate of Analysis Number:

09010851

Report To:		Project Name:	COP Scott Drake No 1
Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax:		Site:	San Juan City, NM
		Site Address:	
		PO Number:	
		State:	New Mexico
		State Cert. No.:	
		Date Reported:	2/2/2009

This Report Contains A Total Of 11 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

2/2/2009

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:

09010851

Report To:		Project Name:	COP Scott Drake No 1
Tetra Tech, Inc.		Site:	San Juan City, NM
Kelly Blanchard		Site Address:	
6121 Indian School Road, N.E.			
Suite 200		PO Number:	
Albuquerque		State:	New Mexico
NM		State Cert. No.:	
87110-		Date Reported:	2/2/2009
ph: (505) 237-8440	fax:		

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

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

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.

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

Erica Cardenas
Project Manager

2/2/2009
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:

09010851

Report To:	Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax: (505) 881-3283	**Project Name:**	COP Scott Drake No 1
		Site:	San Juan City, NM
		Site Address:	
		PO Number:	
		State:	New Mexico
		State Cert. No.:	
Fax To:		**Date Reported:**	2/2/2009

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-4	09010851-01	Water	1/20/2009 1:50:00 PM	1/22/2009 10:00:00 AM		☐
MW-5	09010851-02	Water	1/20/2009 2:25:00 PM	1/22/2009 10:00:00 AM		☐
MW-6	09010851-03	Water	1/20/2009 2:05:00 PM	1/22/2009 10:00:00 AM		☐
Duplicate	09010851-04	Water	1/20/2009 2:30:00 PM	1/22/2009 10:00:00 AM		☐

Erica Cardenas
Project Manager

2/2/2009
Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer

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

Client Sample ID MW-4 **Collected:** 01/20/2009 13:50 **SPL Sample ID:** 09010851-01

Site: San Juan City, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/L**		
Benzene	ND		5	1	01/23/09 18:37	LT	4875826
Ethylbenzene	ND		5	1	01/23/09 18:37	LT	4875826
Toluene	ND		5	1	01/23/09 18:37	LT	4875826
m,p-Xylene	ND		5	1	01/23/09 18:37	LT	4875826
o-Xylene	ND		5	1	01/23/09 18:37	LT	4875826
Xylenes,Total	ND		5	1	01/23/09 18:37	LT	4875826
Surr: 1,2-Dichloroethane-d4	94.0		% 62-130	1	01/23/09 18:37	LT	4875826
Surr: 4-Bromofluorobenzene	94.0		% 70-130	1	01/23/09 18:37	LT	4875826
Surr: Toluene-d8	98.0		% 74-122	1	01/23/09 18:37	LT	4875826

Qualifiers:

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

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

Client Sample ID MW-5 **Collected:** 01/20/2009 14:25 **SPL Sample ID:** 09010851-02

Site: San Juan City, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/L**		
Benzene	ND		5	1	01/23/09 19:05	LT	4875827
Ethylbenzene	ND		5	1	01/23/09 19:05	LT	4875827
Toluene	ND		5	1	01/23/09 19:05	LT	4875827
m,p-Xylene	ND		5	1	01/23/09 19:05	LT	4875827
o-Xylene	ND		5	1	01/23/09 19:05	LT	4875827
Xylenes,Total	ND		5	1	01/23/09 19:05	LT	4875827
Surr: 1,2-Dichloroethane-d4	98.0		% 62-130	1	01/23/09 19:05	LT	4875827
Surr: 4-Bromofluorobenzene	102		% 70-130	1	01/23/09 19:05	LT	4875827
Surr: Toluene-d8	98.0		% 74-122	1	01/23/09 19:05	LT	4875827

Qualifiers:

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

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

Client Sample ID MW-6 **Collected:** 01/20/2009 14:05 **SPL Sample ID:** 09010851-03

Site: San Juan City, NM

Analyses/Method	Result	QUAL		Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/L		
Benzene	ND			5	1	01/23/09 19:33	LT	4875828
Ethylbenzene	ND			5	1	01/23/09 19:33	LT	4875828
Toluene	ND			5	1	01/23/09 19:33	LT	4875828
m,p-Xylene	ND			5	1	01/23/09 19:33	LT	4875828
o-Xylene	ND			5	1	01/23/09 19:33	LT	4875828
Xylenes,Total	ND			5	1	01/23/09 19:33	LT	4875828
Surr: 1,2-Dichloroethane-d4	100		%	62-130	1	01/23/09 19:33	LT	4875828
Surr: 4-Bromofluorobenzene	96.0		%	70-130	1	01/23/09 19:33	LT	4875828
Surr: Toluene-d8	100		%	74-122	1	01/23/09 19:33	LT	4875828

Qualifiers:

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

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

Client Sample ID Duplicate **Collected:** 01/20/2009 14:30 **SPL Sample ID:** 09010851-04

Site: San Juan City, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/L**		
Benzene	ND		5	1	01/23/09 15:49	LT	4875822
Ethylbenzene	ND		5	1	01/23/09 15:49	LT	4875822
Toluene	ND		5	1	01/23/09 15:49	LT	4875822
m,p-Xylene	6		5	1	01/23/09 15:49	LT	4875822
o-Xylene	ND		5	1	01/23/09 15:49	LT	4875822
Xylenes,Total	6		5	1	01/23/09 15:49	LT	4875822
Surr: 1,2-Dichloroethane-d4	94.0		% 62-130	1	01/23/09 15:49	LT	4875822
Surr: 4-Bromofluorobenzene	102		% 70-130	1	01/23/09 15:49	LT	4875822
Surr: Toluene-d8	96.0		% 74-122	1	01/23/09 15:49	LT	4875822

Qualifiers:

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

Quality Control Documentation

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 09010851
Lab Batch ID: R263421

Method Blank

RunID: N_090123D-4875820 Units: ug/L
Analysis Date: 01/23/2009 12:07 Analyst: LT
Preparation Date: 01/23/2009 12:07 Prep By: Method

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	102.0	62-130
Surr: 4-Bromofluorobenzene	94.0	70-130
Surr: Toluene-d8	100.0	74-122

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010851-01A	MW-4
09010851-02A	MW-5
09010851-03A	MW-6
09010851-04A	Duplicate

Laboratory Control Sample (LCS)

RunID: N_090123D-4875819 Units: ug/L
Analysis Date: 01/23/2009 11:27 Analyst: LT
Preparation Date: 01/23/2009 11:27 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	20.0	100	76	126
Ethylbenzene	20.0	20.0	100	67	122
Toluene	20.0	21.0	105	70	131
m,p-Xylene	40.0	39.0	97.5	72	150
o-Xylene	20.0	20.0	100	78	141
Xylenes,Total	60	59	98	72	150
Surr: 1,2-Dichloroethane-d4	50.0	49	98.0	62	130
Surr: 4-Bromofluorobenzene	50.0	50	100	70	130
Surr: Toluene-d8	50.0	50	100	74	122

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

Sample Spiked: 09010851-04
RunID: N_090123D-4875824 Units: ug/L
Analysis Date: 01/23/2009 16:17 Analyst: LT

Qualifiers:

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

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

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

Quality Control Report

Conoco Phillips

COP Scott Drake No 1

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 09010851
Method: SW8260B **Lab Batch ID:** R263421

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	18.0	90.0	20	18.0	90.0	0	22	76	127
Ethylbenzene	ND	20	21.0	90.0	20	20.0	85.0	4.88	20	35	175
Toluene	ND	20	19.0	95.0	20	19.0	95.0	0	24	70	131
m,p-Xylene	6.00	40	42.0	90.0	40	41.0	87.5	2.41	20	35	175
o-Xylene	ND	20	17.0	85.0	20	17.0	85.0	0	20	35	175
Xylenes,Total	6.0	60	59	88	60	58	87	1.7	20	35	175
Surr: 1,2-Dichloroethane-d4	ND	50	46	92.0	50	49.0	98.0	6.32	30	62	130
Surr: 4-Bromofluorobenzene	ND	50	51	102	50	51.0	102	0	30	70	130
Surr: Toluene-d8	ND	50	47	94.0	50	48.0	96.0	2.11	30	74	122

Qualifiers:

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

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

Sample Receipt Checklist

And

Chain of Custody

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

Sample Receipt Checklist

Workorder:	09010851	Received By:	L_C
Date and Time Received:	1/22/2009 10:00:00 AM	Carrier name:	Fedex-Priority
Temperature:	2.5°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?	Yes ☑	No ☐	
8.	Sample containers intact?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test?	Yes ☑	No ☐	
10.	All samples received within holding time?	Yes ☑	No ☐	
11.	Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
12.	Water - VOA vials have zero headspace?	Yes ☑	No ☐	VOA Vials Not Present ☐
13.	Water - Preservation checked upon receipt (except VOA*)?	Yes ☐	No ☐	Not Applicable ☑

*VOA Preservation Checked After Sample Analysis

SPL Representative: _____ Contact Date & Time: _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

Chain of Custody Record

Client: Tetra Tech/ Conoco Phillips — SPL Workorder Number: 0901085L

Attention: Kelly Blanchard/Tetra Tech

Phone: 505-237-8440 — email: kelly.blanchard@tetratech.c

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque — State: NM — Zip Code: 87110

Project Name: ~~Scott Drake #1~~ Scott Drake

P.O. Number:

Sampled By: Christine Mathews

Signature: Christine Mathews

Sample ID	Collected Date	Collected Time	Sample Type Comp	Sample Type Grab	Matrix Water	Matrix Soil	Bottle Type	Preservative Type	# of Containers	Requested Analysis: 8260-BTEX	8015-GRO	8015-DRO	8260-VOC	8270-SVOC	Tot.Metals-Hg-6010/7470	Tot.Metals-6020/7471	Anions	
MW-4	1/20	1350		X	X		1	3	3	X								
MW-5	1/20	1425		X	X		1	3	3	X								
MW-6	1/20	1405		X	X		1	3	3	X								
Duplicate	1/20	1430		X	X		1	3	3	X								

Turnaround Time Requirements: 24 hr ( ) 48 hr ( ) 72 hr ( ) 5 wkday ( ) 10 wkday - Standard ( )

Remarks: Anions=Fl,Cl,N,PO4,SO4 Please analyze to the lowest limit possible

Intact? Y or N

Temperature: 2.5°c

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

Preservative Types: 1: NONE 2. HNO3 3. HCl 4. H2SO4

Relinquished by:	Date	Time	Received by:
Christine Mathews	1.21.09	1620	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by: SPL, Inc.
	1/22/09	10:06	

Page 2 of 2