

3R - 071

APR GWMR

07/23/2010

3R 426

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



TETRA TECH, INC.

July 23, 2010

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

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

Dear Mr. von Gonten:

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

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

Sincerely,

A handwritten signature in cursive script that reads "Kelly E. Blanchard".

Kelly E. Blanchard
Project Manager/Geologist

Cc: Brandon Powell, NMOCD

Enclosures (1)

RECEIVED OGD
2010 JUL 27 A 10:58

**QUARTERLY GROUNDWATER MONITORING
REPORT
April 2010**

CONOCOPHILLIPS COMPANY

**SAN JUAN 27-5 No. 34A
PRODUCTION FACILITY
RIO ARRIBA COUNTY, NEW MEXICO
API # 30-039-23739**

Prepared for:



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

Prepared by:



TETRA TECH, INC.

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

June 2010

TABLE OF CONTENTS

1.0	INTRODUCTION	1
	1.1 Site Background	1
2.0	MONITORING SUMMARY, SAMPLING METHODOLOGY AND RESULTS	2
	2.1 Monitoring Summary.....	2
	2.2 Groundwater Sampling Analytical Results.....	2
3.0	CONCLUSIONS AND RECOMMENDATIONS.....	3
4.0	REFERENCES.....	3

FIGURES

1. Site Location Map
2. Site Detail Map
3. General Geologic Cross Section
4. Groundwater Elevation Contour Map – April 2010

TABLES

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

APPENDICES

- Appendix A. Groundwater Sampling Field Forms
- Appendix B. Laboratory Analytical Report

QUARTERLY GROUNDWATER MONITORING REPORT

SAN JUAN 27-5 NO. 34A, RIO ARRIBA COUNTY, NEW MEXICO

DECEMBER 2009

1.0 INTRODUCTION

This report details the results of quarterly groundwater monitoring completed by Tetra Tech, Inc. (Tetra Tech) on April 8, 2010 at the ConocoPhillips Company San Juan 27-5 No. 34A gas well site in Rio Arriba County, New Mexico (Site). This sampling event represents the fourth quarter of groundwater monitoring conducted by Tetra Tech at the Site.

The Site is located on BLM land outside of Blanco, NM in Section 30, Township 27N, Range 5W, of Rio Arriba County. The location and general features of the Site are presented as **Figures 1** and **2**, respectively. A generalized geologic cross section is presented as **Figure 3**.

1.1 Site Background

The historical timeline of the site is summarized in **Table 1**; and is discussed in more detail below.

Hydrocarbon impacts were discovered beneath an aboveground storage tank (AST) during tank removal at the Site on January 30, 2009. Envirotech Inc. of Farmington, NM (Envirotech) was contacted for spill assessment services following the discovery. Envirotech collected a 5-point composite soil sample from beneath the AST; 4 grab soil samples from test holes advanced around the AST; and an additional 5-point composite soil sample collected from "a small area...excavated to approximately 17 [feet] bgs..." (Envirotech, 2009). All soil samples collected were field analyzed for total petroleum hydrocarbons (TPH) using Environmental Protection Agency (EPA) method 418.1, and for organic vapors using a photoionization detector (PID). The 5-point composite soil samples were also sent for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021, and for TPH analysis by EPA Method 8015. Soil sample results from both 5-point composite samples and from one of the test holes were above recommended action levels; all other samples were below.

On March 3, 2009, Envirotech returned to the Site to continue sampling activities. A 49' x 49' x 20' deep area had been excavated prior to Envirotechs arrival on site. Groundwater was encountered at 20 ft below ground surface (bgs); Envirotech sampled the groundwater for analysis of volatile organic compound (VOC) using EPA method 8260 (Envirotech, 2009). Laboratory results for benzene were found at a concentration above the NMWQCC standard at 96 micrograms per liter (ug/L) in the groundwater sample. Composite soil samples were collected from the bottom of the excavation and from each of the 4 walls; then field analyzed for organic vapors and TPH. All results were below recommended action levels for organic vapors. TPH concentrations were below recommended action levels in all samples excluding one taken from the south wall of the excavation. Subsequently the excavation was continued along the south wall 4 feet further; field TPH analysis on an additional sample was below recommended action levels and excavation activities stopped. Final excavation dimensions were reported at 53 feet by 49 feet by 20 feet deep. Personal communication on July 13, 2009 between Tetra Tech and Wade Hack, ConocoPhillips field manager, revealed that the area of the excavation was

within the current location of the waste water tank and the AST at the Site [**Figure 2**]. A total of 1,900 cubic yards of impacted soil were removed from the Site and transported to an OCD permitted facility located in Farmington, New Mexico. Envirotech recommended the installation of groundwater monitoring wells to determine “groundwater gradient and the extent of groundwater contamination” (Envirotech, 2009).

Between July 15, 2009 and July 16, 2009, EnviroDrill of Albuquerque, New Mexico installed 4 groundwater monitor wells at the Site under the supervision of Tetra Tech: MW-1, MW-2, MW-3, and MW-4. All wells were drilled using a CME-75 drill rig, hollow stem augers, and split-spoon sampling techniques; 15 feet of .010 polyvinylchloride (PVC) slotted screen was placed in each well.

Tetra Tech began groundwater quality monitoring of the site on July 28, 2009. Most recently, groundwater quality monitoring took place on April 8, 2010. This event marks the fourth consecutive round of quarterly monitoring conducted by Tetra Tech at the Site.

2.0 MONITORING SUMMARY, SAMPLING METHODOLOGY AND RESULTS

2.1 Monitoring Summary

Groundwater Elevation Measurements

On April 8, 2010, groundwater elevation measurements were recorded in Monitor Wells MW-1, MW-2, MW-3 and MW-4. **Table 2** presents the monitor well specifications and groundwater level data. A groundwater elevation contour map is presented as **Figure 4**, and illustrates that groundwater at the Site flows north-northeast. Groundwater flow direction changed slightly from previous monitoring events, possibly due to the installation of stock pond northeast of the site.

Groundwater sampling

Groundwater quality samples were collected from Monitor Wells MW-1, MW-2, MW-3 and MW-4 during the April 8, 2010 groundwater sampling event. Approximately 5 gallons of water, or three well volumes, were purged from each monitor well prior to sampling. A dedicated 1.5-inch polyethylene disposable bailer was used in each well to purge and collect groundwater samples. The purged water was disposed of in the on-site produced water tank (**Figure 2**). Samples were placed in laboratory prepared bottles, packed on ice, and shipped under chain of custody documentation to Southern Petroleum Laboratory located in Houston, Texas. Groundwater samples were analyzed for presence of BTEX by Environmental Protection Agency (EPA) Method 8260B and dissolved manganese by EPA Method 6010B. A historical summary of groundwater analytical results is provided in **Table 3**. Field sampling forms are included as **Appendix A**.

2.2 Groundwater Sampling Analytical Results

The New Mexico Water Quality Control Commission (NMWQCC) mandates that groundwater quality in New Mexico be protected, and has issued groundwater quality standards in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC).

- **Manganese**

The groundwater quality standard for manganese is 0.2 milligrams per liter (mg/L). Groundwater collected from monitor wells MW-1, MW-2 and MW-3 were found to contain manganese at concentrations of 0.896 mg/L; 2.43 mg/L; and 2.51 mg/L, respectively.

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

The corresponding laboratory analysis report for the April 2010 groundwater sampling event, including quality control summaries, are included in **Appendix B**.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Tetra Tech recommends continued quarterly groundwater sampling at the Site in order to provide sufficient data for Site closure. Site closure will be requested when groundwater quality results begin to indicate that all constituents of concern are consistently below NMWQCC groundwater quality standards, or are stable and likely representative of site background conditions. Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetrattech.com if you have any questions or require additional information.

4.0 REFERENCES

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

FIGURES



ConocoPhillips High Resolution Aerial Imagery - 2008

FIGURE 1.

Site Location Map
 ConocoPhillips
 Company
 San Juan 27-5 No. 34A
 Rio Arriba County, NM



 ConocoPhillips Company
 San Juan 27-5 #34A Site
 Location

Latitude: 34.547445° N
 Longitude: -107.406587° W



TETRA TECH, INC.

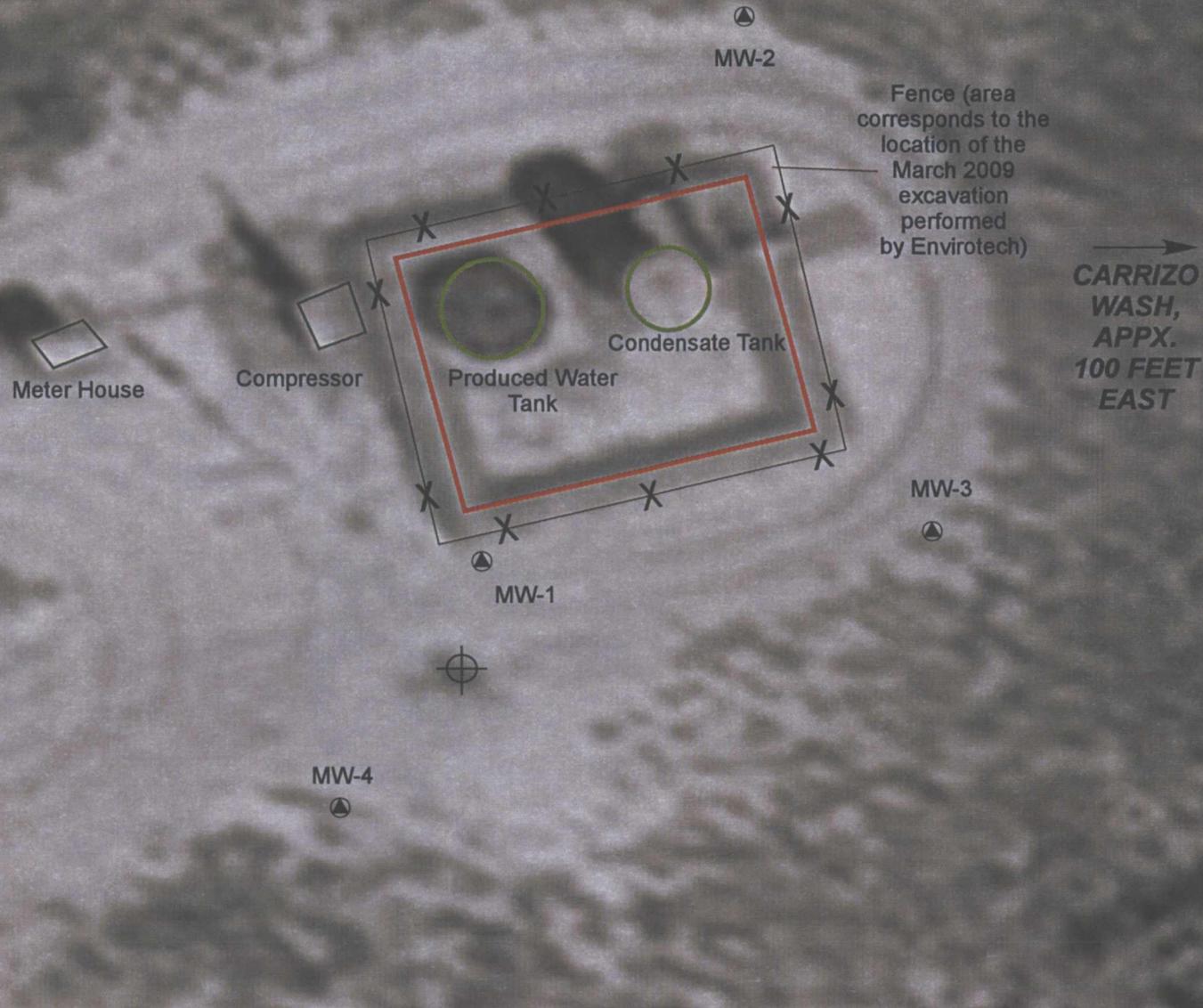
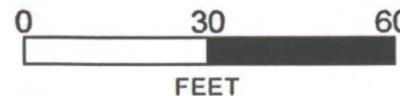


FIGURE 2:
 SITE LAYOUT MAP
 CONOCOPHILLIPS COMPANY
 SAN JUAN 27-5 No. 34A
 GAS PRODUCTION WELL
 Sec 30, T27N, R5W
 Rio Arriba County, New Mexico

LEGEND

-  WELLHEAD
-  MONITOR WELL
-  BERM
-  EQUIPMENT



TETRA TECH, INC.

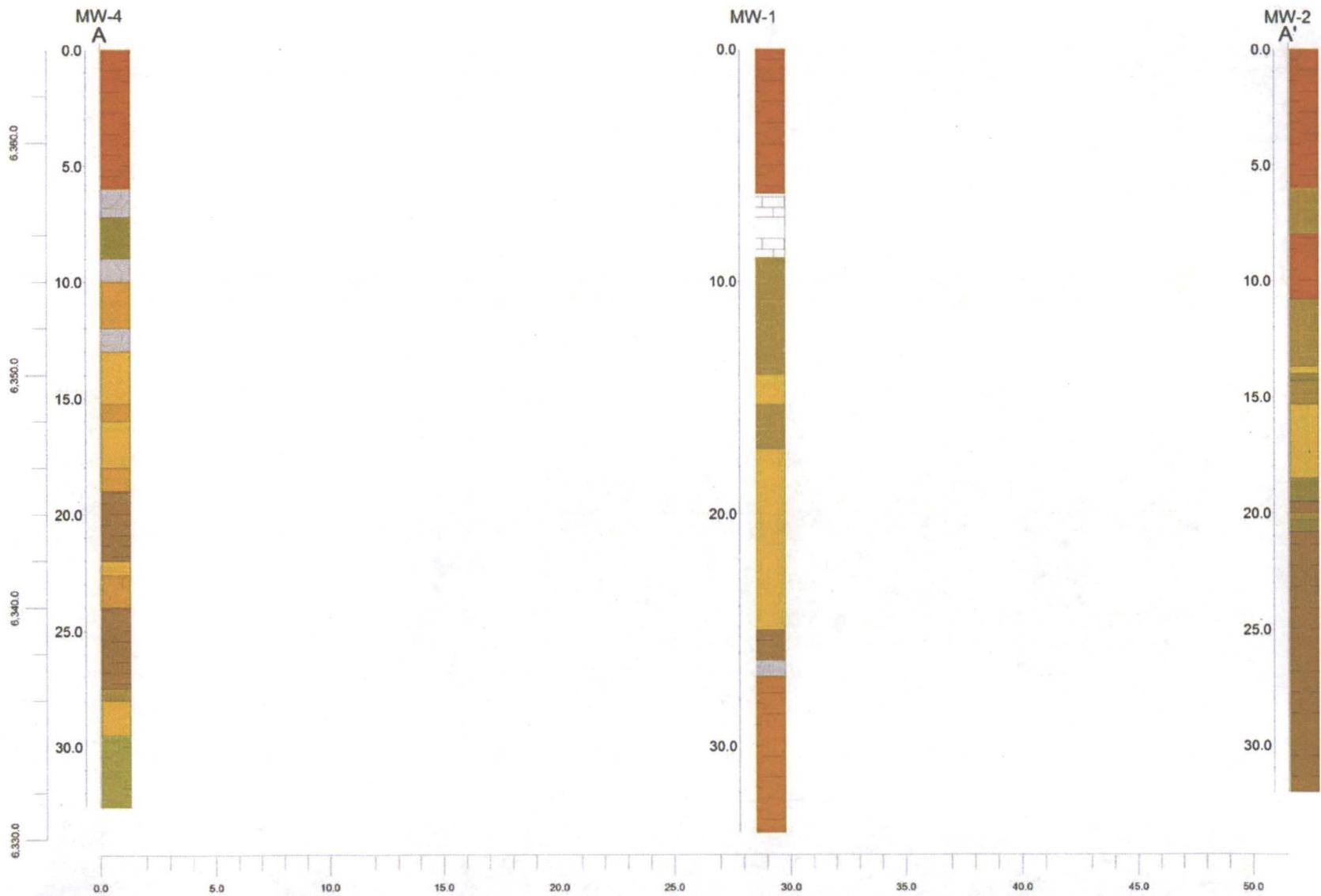


FIGURE 3:
GENERALIZED GEOLOGIC CROSS SECTION
CONOCOPHILLIPS COMPANY
 San Juan 27-5 #34A
 Sec 30, T27N, R5W
 Rio Arriba County, New Mexico

LEGEND

- | | | | |
|---|-----------------------------------|---|------------------------|
|  | Clayey sand |  | Poor Recovery |
|  | Clayey Silt |  | Sandy silt |
|  | Clays |  | Silty Clay |
|  | Fine grained sand |  | Silty Sand |
|  | Fine to medium grained silty sand |  | Very fine grained sand |
|  | Medium grained sand | | |



TETRA TECH, INC.

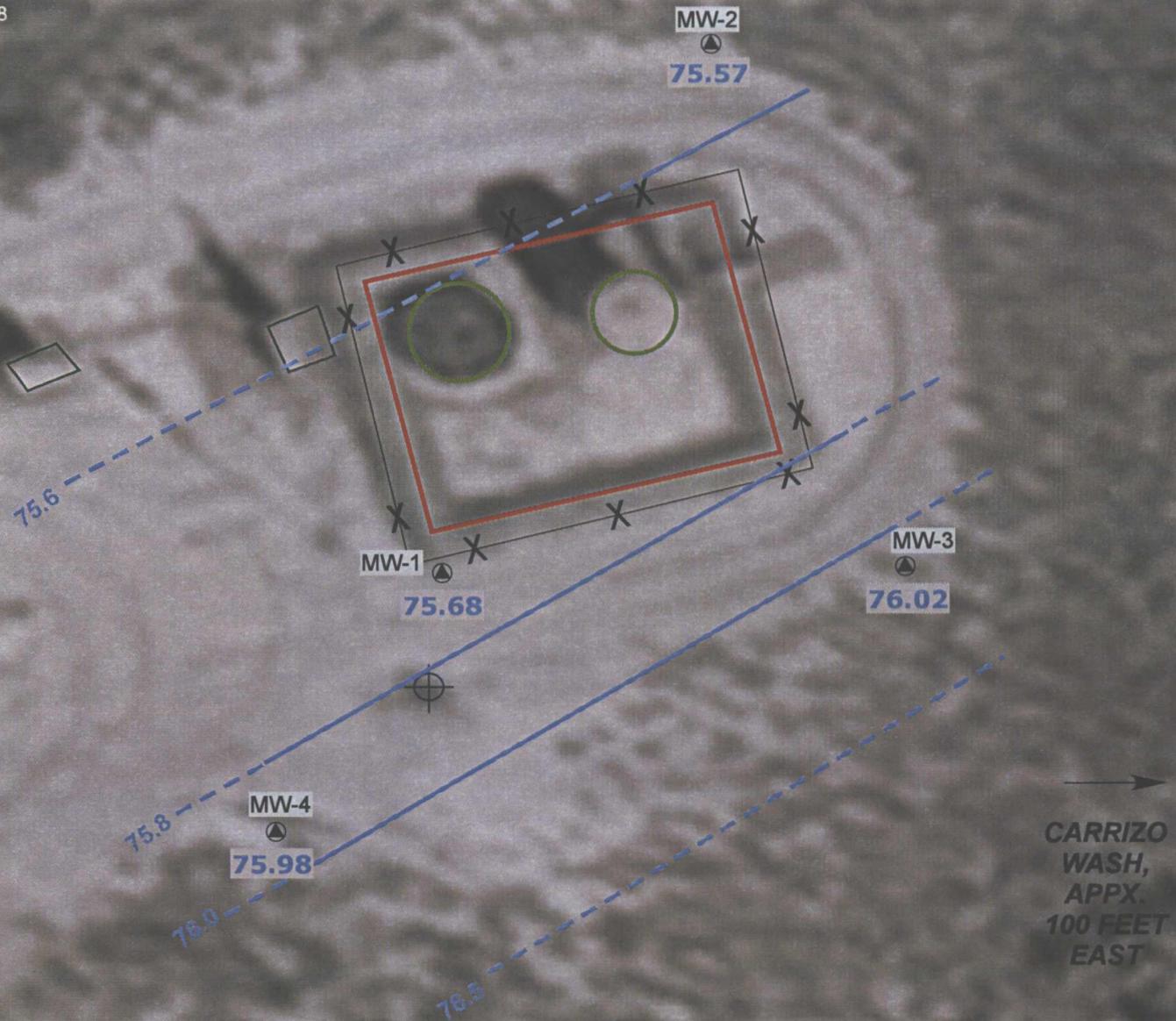


FIGURE 4:
 GROUNDWATER CONTOUR MAP
 04/08/2010
 CONOCOPHILLIPS COMPANY
 SAN JUAN 27-5 No. 34A
 GAS PRODUCTION WELL
 Sec 30, T27N, R5W
 Rio Arriba County, New Mexico

-  WELLHEAD
-  MONITOR WELL
-  BERM
-  EQUIPMENT

LEGEND

-  GROUNDWATER CONTOUR LINE
-  INFERRED GROUNDWATER CONTOUR LINE

0 30 60
 FEET


 N


 TETRA TECH, INC.

TABLES

Table 1. Site History
Tetra Tech, Inc.

ConocoPhillips Company
San Juan 27-5 No. 34A

DATE	ACTIVITY
January 30, 2009	Hydrocarbon impacts are visually confirmed during tank removal at the Site. Envirotech Inc. of Farmington, New Mexico (Envirotech) conduct spill assessment and initial soil sampling.
March 3, 2009	Envirotech oversees soil excavation at the Site. Final dimensions of excavated area are 53'x49'x20' deep. Groundwater is encountered at 20' bgs and sampled. Laboratory results for benzene were found at a concentration of 95.6 micrograms per liter (ug/L)
March 20, 2009	Envirotech excavation report states that a total of 1,900 cubic yards of soil was removed from the Site and transported to an OCD-permitted facility in Farmington, NM. Envirotech recommended the installation of groundwater monitoring wells at the Site (Envirotech, 2009).
April 2, 2009	Tetra Tech visits the Site visit to determine placement of proposed groundwater monitoring wells.
July 15, 2009 & July 16, 2009	Four groundwater monitor wells are installed by EnviroDrill under the supervision of Tetra Tech (MW-1, MW-2, MW-3, MW-4).
July 28, 2009	Baseline groundwater monitoring event was conducted at the Site by Tetra Tech.
September 29, 2009	Quarterly groundwater monitoring event conducted at the Site by Tetra Tech.
December 15, 2009	Quarterly groundwater monitoring event conducted at the Site by Tetra Tech.
April 8, 2010	Quarterly groundwater monitoring event conducted at the Site by Tetra Tech.

Table 2. Groundwater Elevation Data Summary - ConocoPhillips Company San Juan 27-5 No. 34A

Well ID	Total Depth (ft bgs)	Screen Interval (ft)	*Elevation (ft) (TOC)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Groundwater Elevation
MW-1	33.22	18.73 - 33.73	97.44	7/28/2009	23.21	74.23
				9/29/2009	23.88	73.56
				12/15/2009	24.15	73.29
				4/8/2010	21.76	75.68
MW-2	34.35	15.00 - 30.00	96.78	7/28/2009	22.72	74.06
				9/29/2009	23.40	73.38
				12/15/2009	23.66	73.12
				4/8/2010	21.21	75.57
MW-3	33.15	17.55 - 32.55	97.24	7/28/2009	22.84	74.40
				9/29/2009	23.54	73.70
				12/15/2009	23.80	73.44
				4/8/2010	21.22	76.02
MW-4	32.65	17.60 - 32.60	97.23	7/28/2009	22.62	74.61
				9/29/2009	23.31	73.92
				12/15/2009	23.57	73.66
				4/8/2010	21.25	75.98

ft = Feet

TOC = Top of casing

bgs = below ground surface

* Elevation relative to wellhead, set at an arbitrary 100 feet.

Table 3. Groundwater Laboratory Analytical Results Summary - ConocoPhillips Company San Juan 27-5 No. 34A

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solids (mg/L)
MW-1	7/28/2009	< 5	< 5	< 5	< 5	NA	NA
	9/29/2009	< 1	< 1	< 1	< 1	0.694	NA
	12/15/2009	< 1	< 1	< 1	< 1	0.576	NA
	4/8/2010	< 1	< 1	< 1	< 1	0.896	640
MW-2	7/28/2009	< 5	< 5	< 5	< 5	NA	NA
	9/29/2009	< 1	< 1	< 1	< 1	1.38	NA
	12/15/2009	< 1	< 1	< 1	< 1	1.92	NA
	4/8/2010	< 1	< 1	< 1	< 1	2.43	700
MW-3	7/28/2009	< 5	< 5	< 5	< 5	NA	NA
	9/29/2009	< 1	< 1	< 1	< 1	1.7	NA
	12/15/2009	< 1	< 1	< 1	< 1	2.04	NA
	4/8/2010	< 1	< 1	< 1	< 1	2.51	525
MW-4	7/28/2009	< 5	< 5	< 5	< 5	NA	NA
	9/29/2009	< 1	< 1	< 1	< 1	0.269	NA
	12/15/2009	< 1	< 1	< 1	< 1	0.0579	NA
	4/8/2010	< 1	< 1	< 1	< 1	0.121	684
NMWQCC Standards		10 (µg/L)	750 (µg/L)	750 (µg/L)	620 (µg/L)	0.2 (mg/L)	1000 (mg/L)

Explanation

ND = Not Detected

NMWQCC = New Mexico Water Quality Control Commission

mg/L = milligrams per liter (parts per million)

µg/L = micrograms per liter (parts per billion)

NA = Not Analyzed

<0.7 = Below laboratory detection limit of 0.7 ug/L

Bold = concentrations that exceed the NMWQCC limits

APPENDICES

APPENDIX A

Groundwater Sampling Field Forms



WATER SAMPLING FIELD FORM

Project Name San Juan 27-5 #34A

Page 1 of 4

Project No. _____

Site Location _____

Site/Well No. MW-1

Coded/
Replicate No. Dup @ 1055

Date 4-8-10

Weather Sunny, cool

Time Sampling
Began 1030

Time Sampling
Completed 1055 1050

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface _____

MP Elevation _____

Total Sounded Depth of Well Below MP 33.22

Water-Level Elevation _____

Held _____ Depth to Water Below MP 21.76

Diameter of Casing _____

Wet _____ Water Column in Well 11.46

Gallons Pumped/Bailed
Prior to Sampling 5.75

Gallons per Foot 16

Gallons in Well 1.83 x 3

Sampling Pump Intake Setting
(feet below land surface) _____

Purging Equipment Purge pump / Bailer = 5.508

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity (µS/cm ³)	TDS (g/L)	DO (mg/L)	ORP (mV)	DO%
5:25 1045	12.81	7.63	924	.602	4.97	-72.3	51.6
5:50 1047	12.76	7.57	931	.606	3.24	-74.7	30.3
5:15 1049	12.74	7.54	941	.611	2.83	-75.2	26.7

Sampling Equipment Purge Pump/Bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 40mL VOA's	HCl
Dissolved Mn		
TDS		

Remarks H₂O is clear to ^{very} light brown, no odor, no sheen

Sampling Personnel B. Lauder & C. Matthews

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



WATER SAMPLING FIELD FORM

Project Name San Juan 27-5-34A

Page 2 of 4

Project No. _____

Site Location _____

Site/Well No. MW-2 Coded/Replicate No. _____

Date 4-8-10

Weather Sunny, cool Time Sampling Began 0930

Time Sampling Completed 1020

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

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

Total Sounded Depth of Well Below MP 34.35 Water-Level Elevation _____

Held _____ Depth to Water Below MP 21.21 Diameter of Casing _____

Wet _____ Water Column in Well 13.14 Gallons Pumped/Bailed Prior to Sampling 3.25

Gallons per Foot .66

Gallons in Well 2.10 x 3 Sampling Pump Intake Setting (feet below land surface) _____

Purging Equipment Purge pump (Bailer) = 6.307

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity (µS/cm ³)	TDS (g/L)	DO (mg/L)	ORP (mV)	DO %
<u>1016</u>	<u>12.74</u>	<u>7.40</u>	<u>1041</u>	<u>.677</u>	<u>4.41</u>	<u>-39.2</u>	<u>42.0</u>
<u>1018</u>	<u>12.99</u>	<u>7.55</u>	<u>1041</u>	<u>.676</u>	<u>3.67</u>	<u>-63.7</u>	<u>34.8</u>
<u>1020</u>	<u>13.03</u>	<u>7.58</u>	<u>1052</u>	<u>.684</u>	<u>3.51</u>	<u>-67.0</u>	<u>33.3</u>

Sampling Equipment Purge Pump (Bailer)

Constituents Sampled _____ Container Description _____ Preservative _____

BTEX 3 40mL VOA's HCl

Dissolved Mn _____

TDS _____

Remarks Dry @ 2.25 gallons, H₂O is clear, no odor, no steam

Sampling Personnel C. Matthews & B. Lawler

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



WATER SAMPLING FIELD FORM

Project Name San Juan 27-5 #34A

Page 3 of 4

Project No. _____

Site Location _____

Site/Well No. MW-3 Coded/Replicate No. _____

Date 4-8-10

Weather Sunny, Cool Time Sampling Began 0945

Time Sampling Completed 1005

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

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

Total Sounded Depth of Well Below MP 33.15 Water-Level Elevation _____

Held _____ Depth to Water Below MP 21.22 Diameter of Casing _____

Wet _____ Water Column in Well 11.93 Gallons Pumped/Bailed Prior to Sampling 5.5 gallons

Gallons per Foot 1.908

Gallons in Well X3 = 5.726 (Sampling Pump Intake Setting (feet below land surface))

Purging Equipment Purge pump/Bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity (µS/cm ³)	TDS (g/L)	DO (mg/L)	ORP (mV)	DO%
<u>4.75</u> <u>9:57</u>	<u>12.79</u>	<u>7.48</u>	<u>892</u>	<u>.572</u>	<u>4.00</u>	<u>14.1</u>	<u>37.5</u>
<u>5.0</u> <u>9:59</u>	<u>13.17</u>	<u>7.52</u>	<u>857</u>	<u>.558</u>	<u>3.52</u>	<u>-34.3</u>	<u>33.0</u>
<u>5.15</u> <u>10:00</u>	<u>13.23</u>	<u>7.56</u>	<u>845</u>	<u>.549</u>	<u>3.12</u>	<u>-56.1</u>	<u>29.5</u>
<u>5.51</u> <u>10:01</u>	<u>13.24</u>	<u>7.60</u>	<u>841</u>	<u>.547</u>	<u>2.88</u>	<u>-69.1</u>	<u>27.2</u>

Sampling Equipment Purge Pump/Bailer

Constituents Sampled	Container Description	Preservative
<u>BTEX</u>	<u>3 40mL VOA's</u>	<u>HCl</u>
<u>Dissolved Mn</u>	_____	_____
<u>TDS</u>	_____	_____

Remarks _____

Sampling Personnel _____

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



WATER SAMPLING FIELD FORM

Project Name San Juan 27-5#34A

Page 4 of 4

Project No. _____

Site Location _____

Site/Well No. MW-4

Coded/
Replicate No. _____

Date 4-8-10

Weather Sunny, Cool

Time Sampling
Began 0930

Time Sampling
Completed 1105

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface _____

MP Elevation _____

Total Sounded Depth of Well Below MP 32.65

Water-Level Elevation _____

Held _____ Depth to Water Below MP 21.25

Diameter of Casing _____

Wet _____ Water Column in Well 11.4

Gallons Pumped/Bailed
Prior to Sampling _____

Gallons per Foot .16

Gallons in Well 1.824 x 3

Sampling Pump Intake Setting
(feet below land surface) _____

Purging Equipment Purge pump (Bailer) = 5.47

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity (µS/cm ³)	TDS (g/L)	DO (mg/L)	ORP (mV)	
<u>1102</u>	<u>12.57</u>	<u>8.06</u>	<u>1009</u>	<u>.659</u>	<u>3.80</u>	<u>-46.8</u>	<u>24.5</u>
<u>1104</u>	<u>12.67</u>	<u>7.91</u>	<u>1026</u>	<u>.785</u>	<u>3.33</u>	<u>-55.6</u>	<u>31.5</u>
<u>1105</u>	<u>12.69</u>	<u>7.85</u>	<u>1032</u>	<u>.789</u>	<u>2.84</u>	<u>-61.2</u>	<u>31.7</u>

Sampling Equipment Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTEX _____

3 40mL VOA's

HCl _____

Dissolved Mn

TDS

Remarks Dry @ 2.5 gallons

Sampling Personnel B. Lavette & C. Matthews

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

APPENDIX B

Groundwater Laboratory Analysis Report



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

Certificate of Analysis

May 10, 2010

Workorder: H10040210

Kelly Blanchard
Tetra Tech
6121 Indian School Road NE
Suite 200
Albuquerque, NM 87110

Project: San Juan 27-5 #34A
Project Number:
Site: Rio Arriba County
PO Number: ENFOS
NELAC Cert. No.: T104704205-09-1

This Report Contains A Total Of 18 Pages

Excluding Any Attachments



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

Certificate of Analysis

May 10, 2010

Workorder: H10040210

Kelly Blanchard
Tetra Tech
6121 Indian School Road NE
Suite 200
Albuquerque, NM 87110

Project: San Juan 27-5 #34A
Project Number:
Site: Rio Arriba County
PO Number: ENFOS
NELAC Cert. No.: T104704205-09-1

I. SAMPLE RECEIPT:

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

II: ANALYSES AND EXCEPTIONS:

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

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

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

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

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

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

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



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

Certificate of Analysis

May 10, 2010

Workorder: H10040210

Kelly Blanchard
Tetra Tech
6121 Indian School Road NE
Suite 200
Albuquerque, NM 87110

Project: San Juan 27-5 #34A

Project Number:

Site: Rio Arriba County

PO Number: ENFOS

NELAC Cert. No.: T104704205-09-1

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

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

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

Erica Cardenas, Senior Project Manager

Enclosures



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

SAMPLE SUMMARY

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID	Sample ID	Matrix	COC ID	Date/Time Collected	Date/Time Received
H10040210001	MW-1	Water		4/8/2010 10:50	4/10/2010 09:30
H10040210002	MW-2	Water		4/8/2010 10:20	4/10/2010 09:30
H10040210003	MW-3	Water		4/8/2010 10:05	4/10/2010 09:30
H10040210004	MW-4	Water		4/8/2010 11:05	4/10/2010 09:30
H10040210005	Duplicate	Water		4/8/2010 10:55	4/10/2010 09:30
H10040210006	Trip Blank	Water		4/9/2010 15:30	4/10/2010 09:30



SPL Inc.
 8880 Interchange Drive
 Houston, TX 77054
 Phone: (713) 660-0901
 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID: H10040210001

Date/Time Received: 4/10/2010 09:30 Matrix: Water

Sample ID: MW-1

Date/Time Collected: 4/8/2010 10:50

WET CHEMISTRY

Analysis Desc: SM/2540 C

Analytical Batches:

Batch: 1555 SM 2540 C on 04/13/2010 18:50 by CFS

Parameters	Results					Batch Information	
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Residue, Filterable (TDS)	640		10.0	3.94	1		1555

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B

Preparation Batches:

Batch: 1656 SW-846 3010A on 04/12/2010 15:30 by R_V

Analytical Batches:

Batch: 1354 SW-846 6010B on 04/21/2010 02:02 by EBG

Parameters	Results					Batch Information	
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Manganese	0.896		0.00500	0.000300	1		1656 1354

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 1747 SW-846 8260B on 04/13/2010 07:23 by JMC

Parameters	Results					Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Benzene	ND		1.0	0.10	1		1747
Ethylbenzene	ND		1.0	0.15	1		1747
Toluene	ND		1.0	0.29	1		1747
m,p-Xylene	ND		1.0	0.18	1		1747
o-Xylene	ND		1.0	0.13	1		1747
Xylenes, Total	ND		1.0	0.13	1		1747
4-Bromofluorobenzene (S)	94.1 %		74-125		1		1747
1,2-Dichloroethane-d4 (S)	98.7 %		70-130		1		1747
Toluene-d8 (S)	106 %		82-118		1		1747



ANALYTICAL RESULTS

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID: **H10040210002**
 Sample ID: **MW-2**

Date/Time Received: 4/10/2010 09:30 Matrix: Water
 Date/Time Collected: 4/8/2010 10:20

WET CHEMISTRY

Parameters	Results					Batch Information		
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Residue, Filterable (TDS)	700		10.0	3.94	1			1555

ICP DISSOLVED METALS

Parameters	Results					Batch Information		
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Manganese	2.43		0.00500	0.000300	1		1656	1354

VOLATILES

Parameters	Results					Batch Information		
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND		1.0	0.10	1			1747
Ethylbenzene	ND		1.0	0.15	1			1747
Toluene	ND		1.0	0.29	1			1747
m,p-Xylene	ND		1.0	0.18	1			1747
o-Xylene	ND		1.0	0.13	1			1747
Xylenes, Total	ND		1.0	0.13	1			1747
4-Bromofluorobenzene (S)	93.4 %		74-125		1			1747
1,2-Dichloroethane-d4 (S)	103 %		70-130		1			1747
Toluene-d8 (S)	105 %		82-118		1			1747



ANALYTICAL RESULTS

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID: **H10040210003**
 Sample ID: **MW-3**

Date/Time Received: 4/10/2010 09:30 Matrix: Water
 Date/Time Collected: 4/8/2010 10:05

WET CHEMISTRY

Parameters	Results					Batch Information	
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Residue, Filterable (TDS)	525		10.0	3.94	1		1555

ICP DISSOLVED METALS

Parameters	Results					Batch Information	
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Manganese	2.51		0.00500	0.000300	1		1656 1354

VOLATILES

Parameters	Results					Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Benzene	ND		1.0	0.10	1		1747
Ethylbenzene	ND		1.0	0.15	1		1747
Toluene	ND		1.0	0.29	1		1747
m,p-Xylene	ND		1.0	0.18	1		1747
o-Xylene	ND		1.0	0.13	1		1747
Xylenes, Total	ND		1.0	0.13	1		1747
4-Bromofluorobenzene (S)	92 %		74-125		1		1747
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		1747
Toluene-d8 (S)	103 %		82-118		1		1747



SPL Inc.
 8880 Interchange Drive
 Houston, TX 77054
 Phone: (713) 660-0901
 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID: H10040210004

Date/Time Received: 4/10/2010 09:30 Matrix: Water

Sample ID: MW-4

Date/Time Collected: 4/8/2010 11:05

WET CHEMISTRY

Analysis Desc: SM:2540 C

Analytical Batches:

Batch: 1555 SM 2540 C on 04/13/2010 18:50 by CFS

Parameters	Results					Batch Information	
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Residue, Filterable (TDS)	684		10.0	3.94	1		1555

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B

Preparation Batches:

Batch: 1656 SW-846 3010A on 04/12/2010 15:30 by R_V

Analytical Batches:

Batch: 1354 SW-846 6010B on 04/21/2010 03:04 by EBG

Parameters	Results					Batch Information	
	mg/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Manganese	0.121		0.00500	0.000300	1		1656 1354

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 1747 SW-846 8260B on 04/13/2010 08:52 by JMC

Parameters	Results					Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Benzene	ND		1.0	0.10	1		1747
Ethylbenzene	ND		1.0	0.15	1		1747
Toluene	ND		1.0	0.29	1		1747
m,p-Xylene	ND		1.0	0.18	1		1747
o-Xylene	ND		1.0	0.13	1		1747
Xylenes, Total	ND		1.0	0.13	1		1747
4-Bromofluorobenzene (S)	91.6 %		74-125		1		1747
1,2-Dichloroethane-d4 (S)	97.9 %		70-130		1		1747
Toluene-d8 (S)	102 %		82-118		1		1747



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID: H10040210005

Date/Time Received: 4/10/2010 09:30 Matrix: Water

Sample ID: Duplicate

Date/Time Collected: 4/8/2010 10:55

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 1747 SW-846 8260B on 04/13/2010 09:20 by JMC

Parameters	Results					Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep Analysis
Benzene	ND		1.0	0.10	1		1747
Ethylbenzene	ND		1.0	0.15	1		1747
Toluene	ND		1.0	0.29	1		1747
m,p-Xylene	ND		1.0	0.18	1		1747
o-Xylene	ND		1.0	0.13	1		1747
Xylenes, Total	ND		1.0	0.13	1		1747
4-Bromofluorobenzene (S)	92.6 %		74-125		1		1747
1,2-Dichloroethane-d4 (S)	105 %		70-130		1		1747
Toluene-d8 (S)	104 %		82-118		1		1747



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID: H10040210006

Date/Time Received: 4/10/2010 09:30 Matrix: Water

Sample ID: Trip Blank

Date/Time Collected: 4/9/2010 15:30

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 1747 - SW-846 8260B on 04/13/2010 09:47 by JMC

Parameters	Results					Batch Information		
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND		1.0	0.10	1			1747
Ethylbenzene	ND		1.0	0.15	1			1747
Toluene	ND		1.0	0.29	1			1747
m,p-Xylene	ND		1.0	0.18	1			1747
o-Xylene	ND		1.0	0.13	1			1747
Xylenes, Total	ND		1.0	0.13	1			1747
4-Bromofluorobenzene (S)	91.1 %		74-125		1			1747
1,2-Dichloroethane-d4 (S)	97.8 %		70-130		1			1747
Toluene-d8 (S)	99 %		82-118		1			1747



QUALITY CONTROL DATA

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

QC Batch: DIGM/1656 Analysis Method: SW-846 6010B
 QC Batch Method: SW-846 3010A Preparation: 04/12/2010 15:30 by R_V
 Associated Lab Samples: H10040210001 H10040210002 H10040210003 H10040210004 H10040214001 H10040214002
 H10040214003 H10040214004

METHOD BLANK: 38728

Analysis Date/Time Analyst: 04/21/2010 09:49 EBG

Parameter	Units	Blank Result	Qualifiers	Reporting Limit
Manganese	mg/l	ND		0.00500

LABORATORY CONTROL SAMPLE: 38729

Analysis Date/Time Analyst: 04/21/2010 01:57 EBG

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits
Manganese	mg/l	0.10	0.1004	100	80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 38730 38731 Original: H10040210001

MS Analysis Date/Time Analyst: 04/21/2010 02:08 EBG

MSD Analysis Date/Time Analyst: 04/21/2010 02:14 EBG

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Manganese	mg/l	0.896	0.10	0.949	0.9965	NC	NC	75-125	NC	20

QC results presented in the QC Control Data 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. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



SPL Inc.
 8880 Interchange Drive
 Houston, TX 77054
 Phone: (713) 660-0901
 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

QC Batch: WETS/1555 Analysis Method: SM 2540 C
 QC Batch Method: SM 2540 C

Associated Lab Samples: H10040188001 H10040188002 H10040206001 H10040210001 H10040210002 H10040210003
 H10040210004 H10040214001 H10040214002 H10040214003 H10040214004 H10040257001

METHOD BLANK: 39034

Analysis Date/Time Analyst: 04/13/2010 18:50 CFS

Parameter	Units	Blank Result	Qualifiers	Reporting Limit
Residue, Filterable (TDS)	mg/l	ND		10.0

LABORATORY CONTROL SAMPLE & LCSD: 39035 39038

LCS Analysis Date/Time Analyst: 04/13/2010 18:50 CFS

LCSD Analysis Date/Time 04/13/2010 18:50 CFS

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD
Residue, Filterable (TDS)	mg/l	200	202.0	199.0	101	99.5	95-107	1.5	10

SAMPLE DUPLICATE: 39036 Original: H10040206001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	DF
WET CHEMISTRY						
Residue, Filterable (TDS)	mg/l	1420	1420	0.1	10	1

SAMPLE DUPLICATE: 39037 Original: H10040214004

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	DF
WET CHEMISTRY						
Residue, Filterable (TDS)	mg/l	1900	1910	0.5	10	10

QC results presented in the QC Control Data 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. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



SPL Inc.
 8880 Interchange Drive
 Houston, TX 77054
 Phone: (713) 660-0901
 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

QC Batch: MSV/1746 Analysis Method: SW-846 8260B
 QC Batch Method: SW-846 5030 Preparation: 04/12/2010 00:00 by JMC
 Associated Lab Samples: H10040210001 H10040210002 H10040210003 H10040210004 H10040210005 H10040210006
 H10040214001 H10040214002 H10040214003 H10040214004 H10040214005 H10040214006
 H10040214007 H10040214008 H10040214009

METHOD BLANK: 39063

Analysis Date/Time Analyst: 04/13/2010 01:21 JMC

Parameter	Units	Blank Result	Qualifiers	Reporting Limit
Benzene	ug/l	ND		1.0
Ethylbenzene	ug/l	ND		1.0
Toluene	ug/l	ND		1.0
m,p-Xylene	ug/l	ND		1.0
o-Xylene	ug/l	ND		1.0
Xylenes, Total	ug/l	ND		1.0
4-Bromofluorobenzene (S)	%	92.3		74-125
1,2-Dichloroethane-d4 (S)	%	99.9		70-130
Toluene-d8 (S)	%	102		82-118

LABORATORY CONTROL SAMPLE: 39064

Analysis Date/Time Analyst: 04/13/2010 12:21 JMC

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits
Benzene	ug/l	20	20.0	100	74-123
Ethylbenzene	ug/l	20	20.3	101	72-127
Toluene	ug/l	20	20.8	104	74-126
m,p-Xylene	ug/l	40	42.2	105	71-129
o-Xylene	ug/l	20	20.0	100	74-130
Xylenes, Total	ug/l	60	62.18	104	71-130
4-Bromofluorobenzene (S)	%			99.3	74-125
1,2-Dichloroethane-d4 (S)	%			98.5	70-130
Toluene-d8 (S)	%			101	82-118

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 39065 39066 Original: H10040214001

MS Analysis Date/Time Analyst: 04/13/2010 02:43 JMC

MSD Analysis Date/Time Analyst: 04/13/2010 03:11 JMC

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Benzene	ug/l	ND	20	19.8	18.5	99.0	92.3	70-124	7.0	20
Ethylbenzene	ug/l	ND	20	20.3	18.4	101	91.8	35-175	9.9	20

QC results presented in the QC Control Data 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. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 39065 39066 Original: H10040214001

MS Analysis Date/Time Analyst: 04/13/2010 02:43 JMC

MSD Analysis Date/Time Analyst: 04/13/2010 03:11 JMC

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Toluene	ug/l	ND	20	21.7	19.6	108	98.1	70-131	9.9	20
m,p-Xylene	ug/l	ND	40	43.1	39.0	108	97.5	35-175	9.9	20
o-Xylene	ug/l	ND	20	20.7	19.0	103	95.2	35-175	8.3	20
Xylenes, Total	ug/l	ND	60	63.78	58.05	106	96.8	35-175	9.4	20
4-Bromofluorobenzene (S)	%	91.3				97.4	99.3	74-125		30
1,2-Dichloroethane-d4 (S)	%	101				94.9	92.8	70-130		30
Toluene-d8 (S)	%	101				104	105	82-118		30

QC results presented in the QC Control Data 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. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



Legend

(S) - Indicates analyte is a surrogate

Qualifier	Qualifier Description
MI	Matrix Interference
I	Estimated value, between MDL and PQL (Florida)
JN	The analysis indicates the presence of an analyte
C	MTBE results were not confirmed by GCMS
NC	Not Calculated - Sample concentration > 4 times the spike
*	Recovery/RPD value outside QC limits
E	Results exceed calibration range
H	Exceeds holding time
J	Estimated value
Q	Received past holding time
B	Analyte detected in the Method Blank
N	Recovery outside of control limits
D	Recovery out of range due to dilution
NC	Not Calculable (Sample Duplicate)
P	Pesticide dual column results, greater than 25%
TNTC	Too numerous to count



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10040210 : San Juan 27-5 #34A

Project Number:

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
H10040210001	MW-1	SW-846 3010A	DIGM/1656	SW-846 6010B	ICP/1354
H10040210002	MW-2	SW-846 3010A	DIGM/1656	SW-846 6010B	ICP/1354
H10040210003	MW-3	SW-846 3010A	DIGM/1656	SW-846 6010B	ICP/1354
H10040210004	MW-4	SW-846 3010A	DIGM/1656	SW-846 6010B	ICP/1354
H10040210001	MW-1	SM 2540 C	WETS/1555		
H10040210002	MW-2	SM 2540 C	WETS/1555		
H10040210003	MW-3	SM 2540 C	WETS/1555		
H10040210004	MW-4	SM 2540 C	WETS/1555		
H10040210001	MW-1	SW-846 5030	MSV/1746	SW-846 8260B	MSV/1747
H10040210002	MW-2	SW-846 5030	MSV/1746	SW-846 8260B	MSV/1747
H10040210003	MW-3	SW-846 5030	MSV/1746	SW-846 8260B	MSV/1747
H10040210004	MW-4	SW-846 5030	MSV/1746	SW-846 8260B	MSV/1747
H10040210005	Duplicate	SW-846 5030	MSV/1746	SW-846 8260B	MSV/1747
H10040210006	Trip Blank	SW-846 5030	MSV/1746	SW-846 8260B	MSV/1747



Sample Receipt Checklist

WorkOrder:	H10040210	Received By	LOG
Date and Time	04/10/2010 09:30	Carrier Name:	FEDEXP
Temperature:	1.5°C	Chilled By:	Water Ice

1. Shipping container/cooler in good condition? YES
2. Custody seals intact on shipping container/cooler? YES
3. Custody seals intact on sample bottles? Not Present
4. Chain of custody present? YES
5. Chain of custody signed when relinquished and received? YES
6. Chain of custody agrees with sample labels? YES
7. Samples in proper container/bottle? YES
8. Samples containers intact? YES
9. Sufficient sample volume for indicated test? YES
10. All samples received within holding time? YES
11. Container/Temp Blank temperature in compliance? YES
12. Water - VOA vials have zero headspace? YES
13. Water - Preservation checked upon receipt(except VOA*)? Not Applicable

*VOA Preservation Checked After Sample Analysis

SPL Representative:
Client Name Contacted:
Client Instructions:

Contact Date & Time:



SPL, Inc.
 Analysis Request & Chain of Custody Record

H10040210

290727
 age of

Client Name: Tetra Tech / Conoco Phillips
 Address: 6121 Indian School Rd. Ste 200
 City: Abilene State: TX Zip: 79710
 Phone/Fax: 585-237-8440
 Client Contact: Kelly Blanchard Email: Kelly.blanchard@tetratech.com
 Project Name/No.: San Juan 27-5 #34A
 Site Name:
 Site Location: Rio Arriba County
 Invoice To: Conoco Phillips Ph:

matrix bottle size pr
 W=water S=soil O=oil A=air
 SL=sludge E=encore X=other
 P=plastic A=amber glass
 G=glass V=vial X=other
 1=1-liter 4=4oz 40=vial
 8=8oz 16=16oz X=other
 1=HCl 2=HNO3
 3=H2SO4 X=other GENONE
 Number of Containers

Requested Analysis

BTEX ONLY									
Dissolved Mercury									
TDS									

SAMPLE ID	DATE	TIME	comp	grab	W	S	O	A	P	G	1	4	40	8	16	1	2	3	Number of Containers	BTEX ONLY	Dissolved Mercury	TDS
MW-1	4.8.10	1050			X													3	X			
MW-1	4.8.10	1050			X													2		X	X	
MW-2	4.8.10	1020			X													3	X			
MW-2	4.8.10	1020			X													2		X	X	
MW-3	4.8.10	1005			X													3	X			
MW-3	4.8.10	1005			X													2		X	X	
MW-4	4.8.10	1105			X													3	X			
MW-4	4.8.10	1105			X													2		X	X	
Duplicate	4.8.10	1055			X													3	X			
Trip Blank	4.9.10	1530																2	X			

Client/Consultant Remarks: Filters preserve metals container before analysis
 Laboratory remarks:
 Intact? Y N
 Ice? Y N
 Temp: 15

Requested TAT
 1 Business Day Contract
 2 Business Days Standard
 3 Business Days
 Other

Rush TAT requires prior notice

Special Reporting Requirements Results: Fax Email PDF
 Standard QC Level 3 QC Level 4 QC TX TRRP LA RECAP
 Relinquished by: [Signature] date: 4.9.10 time: 1730
 Relinquished by: [Signature] date: 4/10/10 time: 9:30
 Relinquished by: [Signature] date: 4/10/10 time: 9:30

Special Detection Limits (specify):
 PM review (initial):
 2. Received by:
 4. Received by:
 6. Received by Laboratory: Amanda Vicknow

8880 Interchange Drive Houston, TX 77054 (713) 660-0901
 500 Ambassador Caffery Parkway Scott, LA 70583 (337) 237-4775
 459 Hughes Drive Traverse City, MI 49686 (231) 947-5777

