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



TETRATECH, 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,

Kelly E. Blanchard
Project Manager/Geologist

Cc: Brandon Powell, NMOCD

Enclosures (1)

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**QUARTERLY GROUNDWATER MONITORING
REPORT
June 2010**

CONOCOPHILLIPS COMPANY

**SAN JUAN 27-5 No. 34A
NATURAL GAS WELL SITE
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

July 2010

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QUARTERLY GROUNDWATER MONITORING REPORT SAN JUAN 27-5 NO. 34A, RIO ARRIBA COUNTY, NEW MEXICO JUNE 2010

I.0 INTRODUCTION

This report details the results of quarterly groundwater monitoring completed by Tetra Tech, Inc. (Tetra Tech) on June 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 fifth 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**.

I.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 June 8, 2010. This event marks the fifth 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 June 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 a 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 June 8, 2010 groundwater sampling event. Approximately 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 0.612 mg/L; 2.12 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 June 2010 groundwater sampling event is included as **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



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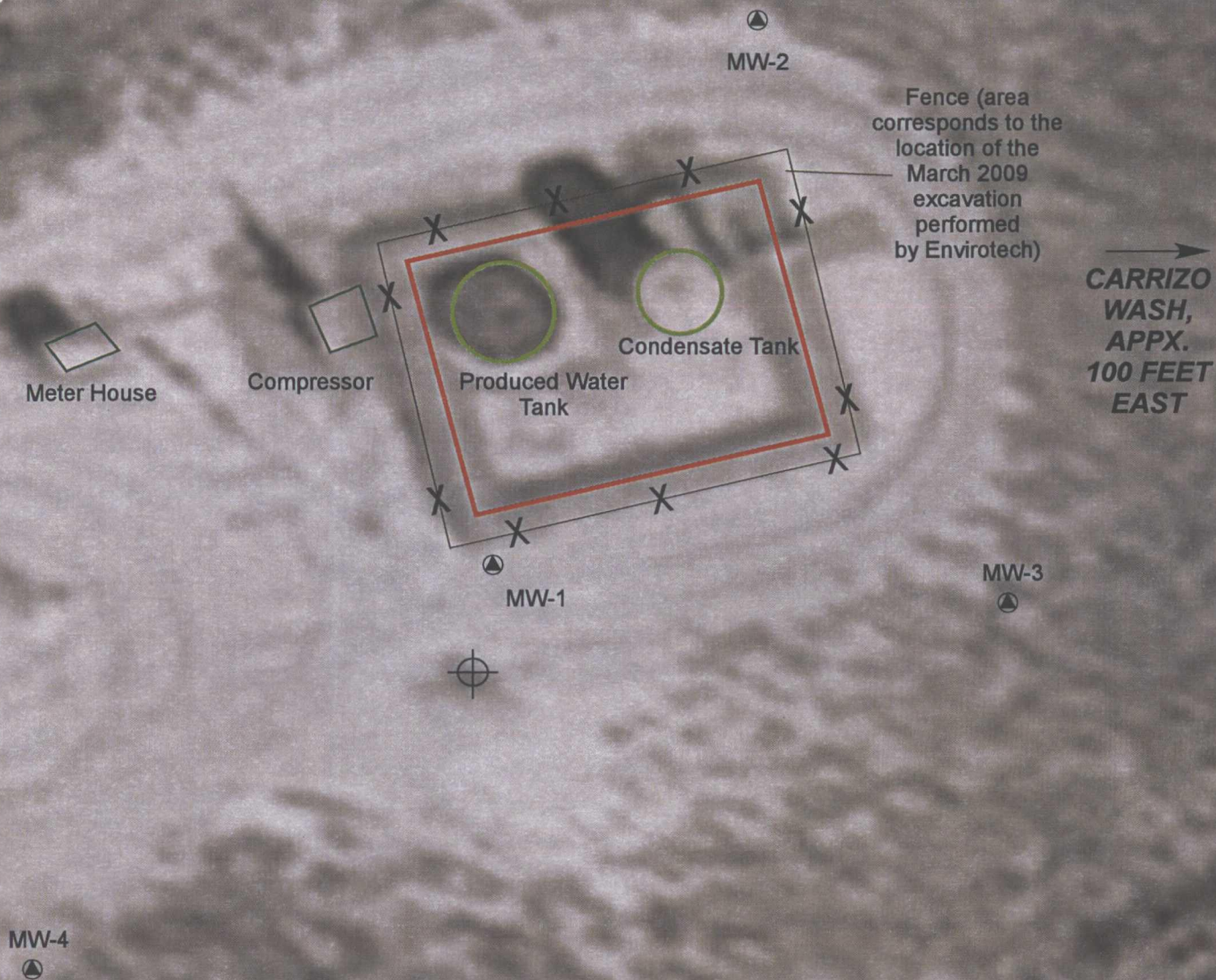




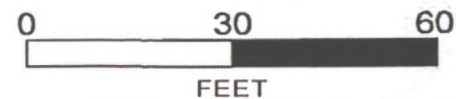


FIGURE 2:
 SITE LAYOUT MAP
 CONOCOPHILLIPS COMPANY
 SAN JUAN 27-5 No. 34A
 GAS PRODUCTION WELL
 Sec 30, T27N, R5W
 Rio Arriba County, New Mexico

LEGEND

-  WELLHEAD
-  MONITOR WELL
-  BERM
-  EQUIPMENT



TETRA TECH, INC.

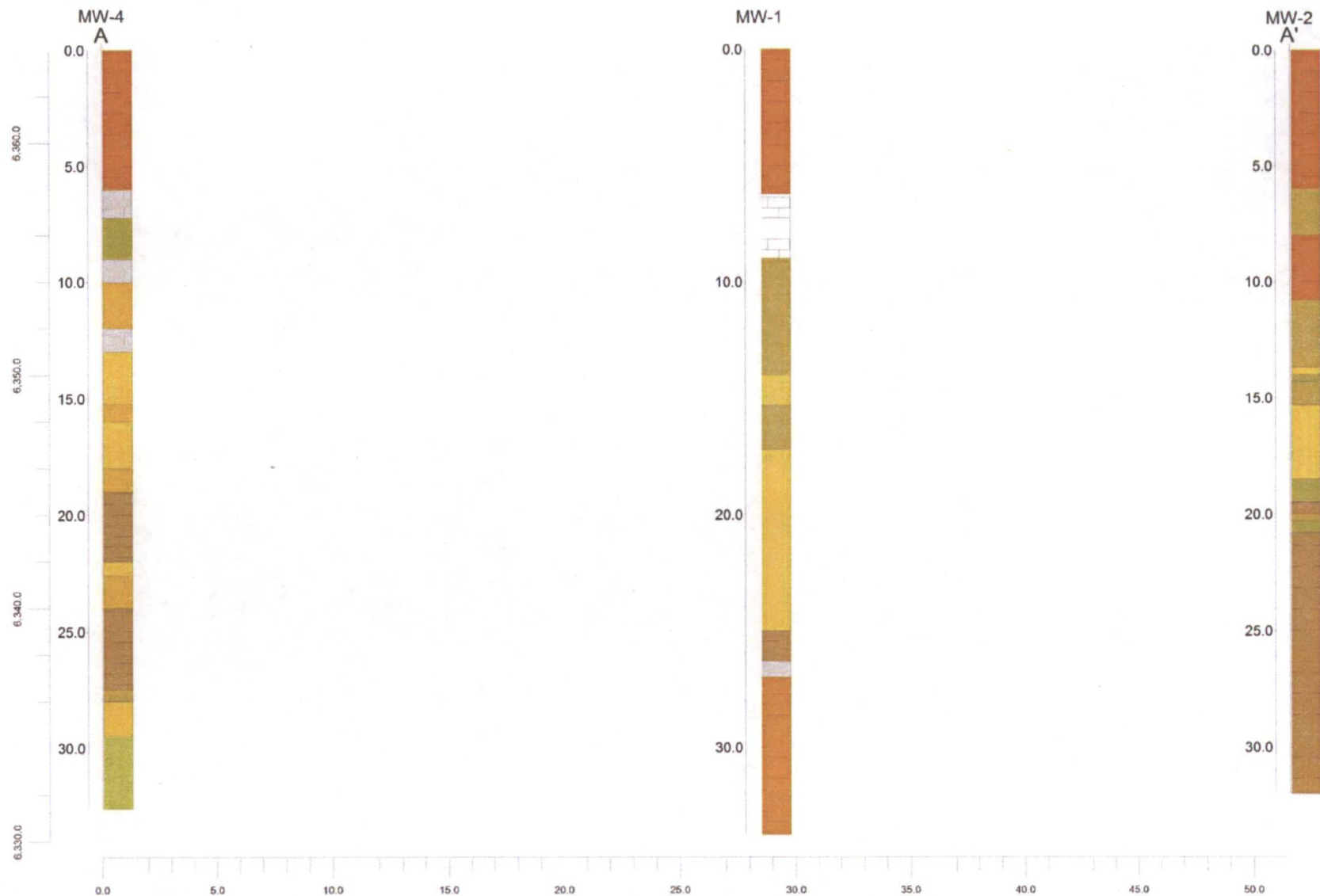


FIGURE 3:
GENERALIZED GEOLOGIC CROSS
SECTION
CONOCOPHILLIPS COMPANY
San Juan 27-5 #34A
Sec 30, T27N, R5W
Rio Arriba County, New Mexico

LEGEND



TETRA TECH, INC.

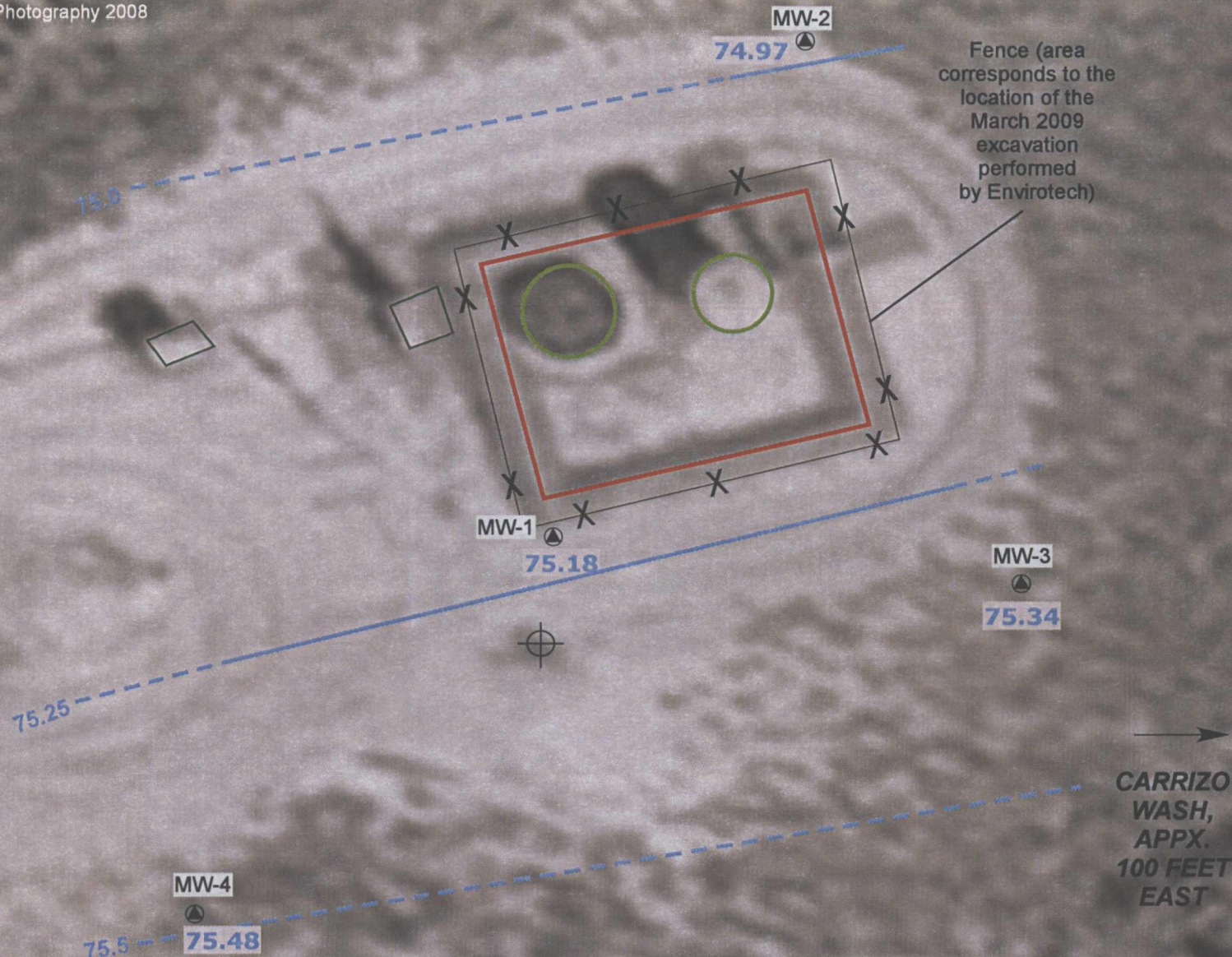


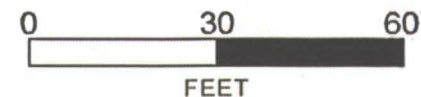


FIGURE 4:
GROUNDWATER CONTOUR MAP
06/08/2010
CONOCOPHILLIPS COMPANY
SAN JUAN 27-5 No. 34A
GAS PRODUCTION WELL
Sec 30, T27N, R5W
Rio Arriba County, New Mexico

-  WELLHEAD
-  MONITOR WELL
-  BERM
-  EQUIPMENT

LEGEND

-  GROUNDWATER CONTOUR LINE
-  INFERRED GROUNDWATER CONTOUR LINE



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), above the NMWQCC standard. |
| 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 quarterly 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. |
| June 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 |
| | | | | 6/8/2010 | 22.26 | 75.18 |
| 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 |
| | | | | 6/8/2010 | 21.81 | 74.97 |
| 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 |
| | | | | 6/8/2010 | 21.90 | 75.34 |
| 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 |
| | | | | 6/8/2010 | 21.75 | 75.48 |

ft = Feet

TOC = Top of casing

bgs = below ground surface

* Elevation relative to production wellhead, set at 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 |
| | 6/8/2010 | <1 | <1 | <1 | <1 | 0.612 | NA |
| 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 |
| | 6/8/2010 | <1 | <1 | <1 | <1 | 2.12 | NA |
| 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 |
| | 6/8/2010 | <1 | <1 | <1 | <1 | 2.51 | NA |
| 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 |
| | 6/8/2010 | <1 | <1 | <1 | <1 | 0.0384 | NA |
| 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



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name San Juan 27-5 34APage 1 of 4

Jct No. _____

Site Location San Juan County, New MexicoSite/Well No. MW-1Coded/
Replicate No. Duplicate @ 0925Date 6/8/10Weather Sunny, 75°Time Sampling
Began 0900Time Sampling
Completed 0918

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 04

Water-Level Elevation _____

Held _____ Depth to Water Below MP 22.26Diameter of Casing 2"Wet _____ Water Column in Well 10.78Gallons Pumped/Bailed
Prior to Sampling 5.25Gallons per Foot 0.16Gallons in Well 1.7248Sampling Pump Intake Setting
(feet below land surface) _____

Purging Equipment

Purge pump/Bailer

X3 = 5.1744

SAMPLING DATA/FIELD PARAMETERS

| Time | Temperature (°C) | pH | Conductivity (µS/cm) | TDS (g/L) | DO (mg/L) | DO % | ORP (mV) | Volume (gal.) |
|-------------|------------------|-------------|----------------------|-----------|-------------|-------------|--------------|---------------|
| <u>0916</u> | <u>12.38</u> | <u>7.56</u> | <u>0.937</u> | <u>—</u> | <u>1.24</u> | <u>11.6</u> | <u>-13.9</u> | <u>4.25</u> |
| <u>0917</u> | <u>12.31</u> | <u>7.51</u> | <u>0.930</u> | <u>—</u> | <u>.87</u> | <u>8.1</u> | <u>-20.8</u> | <u>4.75</u> |
| <u>0918</u> | <u>12.20</u> | <u>7.46</u> | <u>0.940</u> | <u>—</u> | <u>.89</u> | <u>8.3</u> | <u>-25.1</u> | <u>5.0</u> |
| | | | | | | | | |
| | | | | | | | | |

Sampling Equipment

Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTEX

3 40mL VOA's

HCl

Fe, Mn, Al

plastic

none

Remarks

H₂O, nearly clear, no odor or screen observed

Sampling Personnel

CB & CM

Well Casing Volumes

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



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name San Juan 27-5 34APage 2 of 4

act No. _____

Site Location San Juan County, New MexicoSite/Well No. MW-2 Coded/
Replicate No. _____Date 6-8-10Weather Sunny, 75° Time Sampling
Began 0855Time 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 34.35 34.32 Water-Level Elevation _____Held _____ Depth to Water Below MP 21.81 Diameter of Casing 2"Wet _____ Water Column in Well 12.51 Gallons Pumped/Bailed
Prior to Sampling 3.75Gallons per Foot 0.16Gallons in Well 2.0016 Sampling Pump Intake Setting
(feet below land surface) _____Purging Equipment Purge pump (Bailer) X3 = 6.0048

SAMPLING DATA/FIELD PARAMETERS

| Time | Temperature (°C) | pH | Conductivity (µS/cm³) | TDS (g/L) | DO (mg/L) | DO % | ORP (mV) | Volume (gal.) |
|-------------|------------------|-------------|-----------------------|-----------|-------------|-------------|-------------|---------------|
| <u>1003</u> | <u>13.18</u> | <u>7.72</u> | <u>1.044</u> | <u>—</u> | <u>2.42</u> | <u>22.7</u> | <u>28.4</u> | <u>3</u> |
| <u>1004</u> | <u>12.88</u> | <u>7.60</u> | <u>1.045</u> | <u>—</u> | <u>2.23</u> | <u>21.1</u> | <u>21.0</u> | <u>3.5</u> |
| <u>1005</u> | <u>12.78</u> | <u>7.54</u> | <u>1.043</u> | <u>—</u> | <u>2.31</u> | <u>22.0</u> | <u>18.9</u> | <u>3.75</u> |
| | | | | | | | | |
| | | | | | | | | |

Sampling Equipment Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTEX 3 40mL VOA's HClFe, Mn, Al plastic noneRemarks bailed dry at 2.5 gallons @ 0900 / water is light brownSampling Personnel CM & CB

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 |



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name San Juan 27-5 34APage 3 of 4

act No. _____

Site Location San Juan County, New MexicoSite/Well No. MW-3 Coded/
Replicate No. _____Date 6-8-10Weather Sunny, hot 75° Time Sampling
Began 0930 0900Time Sampling
Completed 0935

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

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

Total Sounded Depth of Well Below MP 33.15 33.04 Water-Level Elevation _____Held _____ Depth to Water Below MP 21.90 Diameter of Casing 2"Wet _____ Water Column in Well 11.14 Gallons Pumped/Bailed
Prior to Sampling 5.5Gallons per Foot 0.16Gallons in Well 1.7824 Sampling Pump Intake Setting
(feet below land surface) _____Purging Equipment Purge pump 3 X3 = 5.3472

SAMPLING DATA/FIELD PARAMETERS

| Time | Temperature (°C) | pH | Conductivity (µS/cm ²) | TDS (g/L) | DO (mg/L) | DO % | ORP (mV) | Volume (gal.) |
|-------------|------------------|-------------|------------------------------------|-----------|-------------|-------------|-------------|---------------|
| <u>0931</u> | <u>12.64</u> | <u>7.33</u> | <u>0.896</u> | <u>—</u> | <u>1.81</u> | <u>17.2</u> | <u>-4.7</u> | <u>4.5</u> |
| <u>0932</u> | <u>12.65</u> | <u>7.29</u> | <u>0.901</u> | <u>—</u> | <u>1.87</u> | <u>17.8</u> | <u>-3.7</u> | <u>5.0</u> |
| <u>0933</u> | <u>12.65</u> | <u>7.27</u> | <u>0.904</u> | <u>—</u> | <u>1.91</u> | <u>18.0</u> | <u>-3.3</u> | <u>5.25</u> |
| <u>0933</u> | <u>12.66</u> | <u>7.25</u> | <u>0.906</u> | <u>—</u> | <u>1.92</u> | <u>17.9</u> | <u>-3.9</u> | <u>5.5</u> |

Sampling Equipment Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTX _____ 3 40mL VOA's _____ HCl _____

Fe, Mn, Al _____ plastic _____ none _____Remarks water is light brown; no odor or green detectedSampling Personnel CM, CB

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 |



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name San Juan 27-5 34APage 4 of 4

act No. _____

Site Location San Juan County, New MexicoSite/Well No. MW-4 Coded/
Replicate No. _____Date 6-8-10Weather Sunny, 75° Time Sampling
Began 0855Time Sampling
Completed 0955

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 32.55 Water-Level Elevation _____Held _____ Depth to Water Below MP 21.75 Diameter of Casing 2"Wet _____ Water Column in Well 10.75 Gallons Pumped/Bailed
Prior to Sampling 3.0Gallons per Foot 0.16Gallons in Well 1.72 Sampling Pump Intake Setting
(feet below land surface) _____Purging Equipment Purge pump Bailer x3 = 5.16

SAMPLING DATA/FIELD PARAMETERS

| Time | Temperature (°C) | pH | Conductivity (µS/cm) | TDS (g/L) | DO (mg/L) | DO % | ORP (mV) | Volume (gal.) |
|-------------|------------------|-------------|----------------------|-----------|-------------|-------------|--------------|---------------|
| <u>0950</u> | <u>12.57</u> | <u>7.84</u> | <u>1.069</u> | <u>—</u> | <u>3.50</u> | <u>31.9</u> | <u>136.4</u> | <u>2.5</u> |
| <u>0952</u> | <u>12.48</u> | <u>7.77</u> | <u>1.070</u> | <u>—</u> | <u>3.33</u> | <u>31.1</u> | <u>128.5</u> | <u>3.0</u> |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Sampling Equipment Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTEX _____ 3 40mL VOA's _____ HCl _____

Fe, Mn, Al _____ plastic _____ none _____Remarks bailed dry @ 2 gallons @ 0900Sampling Personnel CM & CB

Well Casing Volumes

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

APPENDIX B

Groundwater Laboratory Analysis Report



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

Certificate of Analysis

June 24, 2010

Workorder: H10060237

Cassandra Brown
Tetra Tech, Inc.
6121 Indian School Road NE
Suite 200
Albuquerque, NM 87110

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

This Report Contains A Total Of 17 Pages

Excluding Any Attachments



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Project: San Juan 27-5 #34A
Project Number: San Juan 27-5 #34A
Site: Rio Arriba County, NM
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.



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Certificate of Analysis

June 24, 2010

Workorder: H10060237

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Tetra Tech, Inc.
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Suite 200
Albuquerque, NM 87110

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



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SAMPLE SUMMARY

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

| Lab ID | Sample ID | Matrix | COC ID | Date/Time Collected | Date/Time Received |
|--------------|------------|--------|--------|------------------------|-----------------------|
| H10060237001 | MW-1 | Water | | 6/8/2010 09:18 | 6/10/2010 09:30 |
| H10060237002 | MW-2 | Water | | 6/8/2010 10:05 | 6/10/2010 09:30 |
| H10060237003 | MW-3 | Water | | 6/8/2010 09:35 | 6/10/2010 09:30 |
| H10060237004 | MW-4 | Water | | 6/8/2010 09:55 | 6/10/2010 09:30 |
| H10060237005 | Duplicate | Water | | 6/8/2010 09:25 | 6/10/2010 09:30 |
| H10060237006 | Trip Blank | Water | | 6/9/2010 08:45 | 6/10/2010 09:30 |



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ANALYTICAL RESULTS

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

Lab ID: H10060237001

Date/Time Received: 6/10/2010 09:30

Matrix: Water

Sample ID: MW-1

Date/Time Collected: 6/8/2010 09:18

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B

Preparation Batches:

Batch: 1819 SW-846 3010A on 06/10/2010 15:00 by R_V

Analytical Batches:

Batch: 1456 SW-846 6010B on 06/18/2010 16:22 by EBG

| Parameters | Results | Qual | Report Limit | MDL | DF | RegLmt | Batch Information | |
|------------|---------|------|--------------|----------|----|--------|-------------------|----------|
| | mg/l | | | | | | Prep | Analysis |
| Manganese | 0.612 | | 0.00500 | 0.000300 | 1 | | 1819 | 1456 |

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030Analytical Batches:

Batch: 2049 SW-846 8260B on 06/16/2010 17:07 by JMC

| Parameters | Results | Qual | Report Limit | MDL | DF | RegLmt | Batch Information | |
|---------------------------|---------|------|--------------|------|----|--------|-------------------|----------|
| | ug/l | | | | | | Prep | Analysis |
| Benzene | ND | | 1.0 | 0.10 | 1 | | | 2049 |
| Ethylbenzene | ND | | 1.0 | 0.15 | 1 | | | 2049 |
| Toluene | ND | | 1.0 | 0.29 | 1 | | | 2049 |
| m,p-Xylene | ND | | 1.0 | 0.18 | 1 | | | 2049 |
| o-Xylene | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| Xylenes, Total | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| 4-Bromofluorobenzene (S) | 87.9 % | | 74-125 | | 1 | | | 2049 |
| 1,2-Dichloroethane-d4 (S) | 86.1 % | | 70-130 | | 1 | | | 2049 |
| Toluene-d8 (S) | 99.7 % | | 82-118 | | 1 | | | 2049 |



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ANALYTICAL RESULTS

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

Lab ID: H10060237002

Date/Time Received: 6/10/2010 09:30

Matrix: Water

Sample ID: MW-2

Date/Time Collected: 6/8/2010 10:05

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B

Preparation Batches:

Batch: 1819 SW-846 3010A on 06/10/2010 15:00 by R_V

Analytical Batches:

Batch: 1456 SW-846 6010B on 06/18/2010 16:29 by EBG

| Parameters | Results | | | | DF | RegLmt | Batch Information | |
|------------|---------|------|--------------|----------|----|--------|-------------------|----------|
| | mg/l | Qual | Report Limit | MDL | | | Prep | Analysis |
| Manganese | 2.12 | | 0.00500 | 0.000300 | 1 | | 1819 | 1456 |

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 2049 SW-846 8260B on 06/16/2010 18:31 by JMC

| Parameters | Results | | | | DF | RegLmt | Batch Information | |
|---------------------------|---------|------|--------------|------|----|--------|-------------------|----------|
| | ug/l | Qual | Report Limit | MDL | | | Prep | Analysis |
| Benzene | ND | | 1.0 | 0.10 | 1 | | | 2049 |
| Ethylbenzene | ND | | 1.0 | 0.15 | 1 | | | 2049 |
| Toluene | ND | | 1.0 | 0.29 | 1 | | | 2049 |
| m,p-Xylene | ND | | 1.0 | 0.18 | 1 | | | 2049 |
| o-Xylene | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| Xylenes, Total | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| 4-Bromofluorobenzene (S) | 89.1 % | | 74-125 | | 1 | | | 2049 |
| 1,2-Dichloroethane-d4 (S) | 83.7 % | | 70-130 | | 1 | | | 2049 |
| Toluene-d8 (S) | 101 % | | 82-118 | | 1 | | | 2049 |



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ANALYTICAL RESULTS

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

Lab ID: H10060237003

Date/Time Received: 6/10/2010 09:30

Matrix: Water

Sample ID: MW-3

Date/Time Collected: 6/8/2010 09:35

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B

Preparation Batches:

Batch: 1819 SW-846 3010A on 06/10/2010 15:00 by R_V

Analytical Batches:

Batch: 1456 SW-846 6010B on 06/18/2010 16:35 by EBG

| Parameters | Results | Qual | Report Limit | MDL | DF | RegLmt | Batch Information | |
|------------|---------|------|--------------|----------|----|--------|-------------------|----------|
| | mg/l | | | | | | Prep | Analysis |
| Manganese | 2.51 | | 0.00500 | 0.000300 | 1 | | 1819 | 1456 |

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030Analytical Batches:

Batch: 2049 SW-846 8260B on 06/16/2010 19:00 by JMC

| Parameters | Results | Qual | Report Limit | MDL | DF | RegLmt | Batch Information | |
|---------------------------|---------|------|--------------|------|----|--------|-------------------|----------|
| | ug/l | | | | | | Prep | Analysis |
| Benzene | ND | | 1.0 | 0.10 | 1 | | | 2049 |
| Ethylbenzene | ND | | 1.0 | 0.15 | 1 | | | 2049 |
| Toluene | ND | | 1.0 | 0.29 | 1 | | | 2049 |
| m,p-Xylene | ND | | 1.0 | 0.18 | 1 | | | 2049 |
| o-Xylene | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| Xylenes, Total | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| 4-Bromofluorobenzene (S) | 86.7 % | | 74-125 | | 1 | | | 2049 |
| 1,2-Dichloroethane-d4 (S) | 86.7 % | | 70-130 | | 1 | | | 2049 |
| Toluene-d8 (S) | 98.2 % | | 82-118 | | 1 | | | 2049 |



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ANALYTICAL RESULTS

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

Lab ID: H10060237004

Date/Time Received: 6/10/2010 09:30 Matrix: Water

Sample ID: MW-4

Date/Time Collected: 6/8/2010 09:55

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B

Preparation Batches:

Batch: 1819 SW-846 3010A on 06/10/2010 15:00 by R_V

Analytical Batches:

Batch: 1456 SW-846 6010B on 06/18/2010 16:41 by EBG

| Parameters | Results | | | | DF | RegLmt | Batch Information | |
|------------|---------|------|--------------|----------|----|--------|-------------------|----------|
| | mg/l | Qual | Report Limit | MDL | | | Prep | Analysis |
| Manganese | 0.0384 | | 0.00500 | 0.000300 | 1 | | 1819 | 1456 |

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030Analytical Batches:

Batch: 2049 SW-846 8260B on 06/16/2010 19:28 by JMC

| Parameters | Results | | | | DF | RegLmt | Batch Information | |
|---------------------------|---------|------|--------------|------|----|--------|-------------------|----------|
| | ug/l | Qual | Report Limit | MDL | | | Prep | Analysis |
| Benzene | ND | | 1.0 | 0.10 | 1 | | | 2049 |
| Ethylbenzene | ND | | 1.0 | 0.15 | 1 | | | 2049 |
| Toluene | ND | | 1.0 | 0.29 | 1 | | | 2049 |
| m,p-Xylene | ND | | 1.0 | 0.18 | 1 | | | 2049 |
| o-Xylene | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| Xylenes, Total | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| 4-Bromofluorobenzene (S) | 87.9 % | | 74-125 | | 1 | | | 2049 |
| 1,2-Dichloroethane-d4 (S) | 85.9 % | | 70-130 | | 1 | | | 2049 |
| Toluene-d8 (S) | 101 % | | 82-118 | | 1 | | | 2049 |



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ANALYTICAL RESULTS

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

Lab ID: H10060237005

Date/Time Received: 6/10/2010 09:30

Matrix: Water

Sample ID: Duplicate

Date/Time Collected: 6/8/2010 09:25

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 2049 SW-846 8260B on 06/16/2010 19:56 by JMC

| Parameters | Results | | | | DF | RegLmt | Batch Information | |
|---------------------------|---------|------|--------------|------|----|--------|-------------------|----------|
| | ug/l | Qual | Report Limit | MDL | | | Prep | Analysis |
| Benzene | ND | | 1.0 | 0.10 | 1 | | | 2049 |
| Ethylbenzene | ND | | 1.0 | 0.15 | 1 | | | 2049 |
| Toluene | ND | | 1.0 | 0.29 | 1 | | | 2049 |
| m,p-Xylene | ND | | 1.0 | 0.18 | 1 | | | 2049 |
| o-Xylene | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| Xylenes, Total | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| 4-Bromofluorobenzene (S) | 89.2 % | | 74-125 | | 1 | | | 2049 |
| 1,2-Dichloroethane-d4 (S) | 83.2 % | | 70-130 | | 1 | | | 2049 |
| Toluene-d8 (S) | 102 % | | 82-118 | | 1 | | | 2049 |



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ANALYTICAL RESULTS

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

Lab ID: H10060237006

Date/Time Received: 6/10/2010 09:30 Matrix: Water

Sample ID: Trip Blank

Date/Time Collected: 6/9/2010 08:45

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 2049 SW-846 8260B on 06/16/2010 20:24 by JMC

| Parameters | Results | | | MDL | DF | RegLmt | Batch Information | |
|---------------------------|---------|------|--------------|------|----|--------|-------------------|----------|
| | ug/l | Qual | Report Limit | | | | Prep | Analysis |
| Benzene | ND | | 1.0 | 0.10 | 1 | | | 2049 |
| Ethylbenzene | ND | | 1.0 | 0.15 | 1 | | | 2049 |
| Toluene | ND | | 1.0 | 0.29 | 1 | | | 2049 |
| m,p-Xylene | ND | | 1.0 | 0.18 | 1 | | | 2049 |
| o-Xylene | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| Xylenes, Total | ND | | 1.0 | 0.13 | 1 | | | 2049 |
| 4-Bromofluorobenzene (S) | 88.9 % | | 74-125 | | 1 | | | 2049 |
| 1,2-Dichloroethane-d4 (S) | 82.6 % | | 70-130 | | 1 | | | 2049 |
| Toluene-d8 (S) | 101 % | | 82-118 | | 1 | | | 2049 |



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QUALITY CONTROL DATA

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

QC Batch: DIGM/1819 Analysis Method: SW-846 6010B
QC Batch Method: SW-846 3010A Preparation: 06/10/2010 15:00 by R_V
Associated Lab Samples: H10060237001 H10060237002 H10060237003 H10060237004 H10060241001 H10060241002
H10060241003 H10060243001 H10060243002 H10060243003 H10060243004 H10060245001
H10060245002 H10060245003 H10060245004 H10060247001 H10060247002 H10060247003
H10060247005

METHOD BLANK: 50257

Analysis Date/Time Analyst: 06/18/2010 13:14 EBG

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

LABORATORY CONTROL SAMPLE: 50258

Analysis Date/Time Analyst: 06/18/2010 13:20 EBG

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits |
|-----------|-------|-------------|------------|-----------|--------------|
| Manganese | mg/l | 0.10 | 0.1008 | 101 | 80-120 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 50259 50260 Original: H10060241001

MS Analysis Date/Time Analyst: 06/18/2010 13:32 EBG

MSD Analysis Date/Time Analyst: 06/18/2010 13:38 EBG

| Parameter | Units | Original Result | Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limit | RPD | Max RPD |
|-----------|-------|-----------------|-------------|-----------|------------|----------|-----------|-------------|-----|---------|
| Manganese | mg/l | 0.206 | 0.10 | 0.3011 | 0.3025 | 95.5 | 96.9 | 75-125 | 0.5 | 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.



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QUALITY CONTROL DATA

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

QC Batch: MSV/2048

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030

Preparation: 06/16/2010 00:00 by JMC

Associated Lab Samples: H10060233002 H10060233003 H10060233004 H10060237001 H10060237002 H10060237003
H10060237004 H10060237005 H10060237006 H10060241001 H10060241002 H10060241003
H10060241004 H10060243001 H10060243002 H10060243003 H10060243004 H10060243005
H10060243006

METHOD BLANK: 51465

Analysis Date/Time Analyst: 06/16/2010 15:16 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) | % | 90.4 | | 74-125 |
| 1,2-Dichloroethane-d4 (S) | % | 89.2 | | 70-130 |
| Toluene-d8 (S) | % | 100 | | 82-118 |

LABORATORY CONTROL SAMPLE: 51466

Analysis Date/Time Analyst: 06/16/2010 14:48 JMC

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits |
|---------------------------|-------|-------------|------------|-----------|--------------|
| Benzene | ug/l | 20 | 16.3 | 81.4 | 74-123 |
| Ethylbenzene | ug/l | 20 | 17.9 | 89.6 | 72-127 |
| Toluene | ug/l | 20 | 20.5 | 102 | 74-126 |
| m,p-Xylene | ug/l | 40 | 37.3 | 93.3 | 71-129 |
| o-Xylene | ug/l | 20 | 19.3 | 96.6 | 74-130 |
| Xylenes, Total | ug/l | 60 | 56.63 | 94.4 | 71-130 |
| 4-Bromofluorobenzene (S) | % | | | 103 | 74-125 |
| 1,2-Dichloroethane-d4 (S) | % | | | 86.5 | 70-130 |
| Toluene-d8 (S) | % | | | 104 | 82-118 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 51467

51468

Original: H10060237001

MS Analysis Date/Time Analyst: 06/16/2010 17:35 JMC

MSD Analysis Date/Time Analyst: 06/16/2010 18:03 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 | 16.4 | 16.3 | 81.9 | 81.3 | 70-124 | 0.8 | 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.



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QUALITY CONTROL DATA

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 51467

51468

Original: H10060237001

MS Analysis Date/Time Analyst: 06/16/2010 17:35 JMC

MSD Analysis Date/Time Analyst: 06/16/2010 18:03 JMC

| Parameter | Units | Original Result | Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limit | RPD | Max RPD |
|---------------------------|-------|--------------------|----------------|--------------|---------------|-------------|--------------|----------------|-----|------------|
| Ethylbenzene | ug/l | ND | 20 | 18.1 | 18.8 | 90.4 | 94.0 | 35-175 | 3.9 | 20 |
| Toluene | ug/l | ND | 20 | 20.6 | 21.4 | 103 | 107 | 70-131 | 4.0 | 20 |
| m,p-Xylene | ug/l | ND | 40 | 37.6 | 38.2 | 93.9 | 95.5 | 35-175 | 1.7 | 20 |
| o-Xylene | ug/l | ND | 20 | 19.0 | 19.6 | 95.2 | 97.9 | 35-175 | 2.8 | 20 |
| Xylenes, Total | ug/l | ND | 60 | 56.6 | 57.78 | 94.3 | 96.3 | 35-175 | 2.1 | 20 |
| 4-Bromofluorobenzene (S) | % | 87.9 | | | | 100 | 101 | 74-125 | | 30 |
| 1,2-Dichloroethane-d4 (S) | % | 86.1 | | | | 83.5 | 82.0 | 70-130 | | 30 |
| Toluene-d8 (S) | % | 99.7 | | | | 102 | 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.



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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 |



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10060237 : San Juan 27-5 #34A

Project Number: San Juan 27-5 #34A

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|--------------|------------|-----------------|-----------|-------------------|------------------|
| H10060237001 | MW-1 | SW-846 3010A | DIGM/1819 | SW-846 6010B | ICP/1456 |
| H10060237002 | MW-2 | SW-846 3010A | DIGM/1819 | SW-846 6010B | ICP/1456 |
| H10060237003 | MW-3 | SW-846 3010A | DIGM/1819 | SW-846 6010B | ICP/1456 |
| H10060237004 | MW-4 | SW-846 3010A | DIGM/1819 | SW-846 6010B | ICP/1456 |
| H10060237001 | MW-1 | SW-846 5030 | MSV/2048 | SW-846 8260B | MSV/2049 |
| H10060237002 | MW-2 | SW-846 5030 | MSV/2048 | SW-846 8260B | MSV/2049 |
| H10060237003 | MW-3 | SW-846 5030 | MSV/2048 | SW-846 8260B | MSV/2049 |
| H10060237004 | MW-4 | SW-846 5030 | MSV/2048 | SW-846 8260B | MSV/2049 |
| H10060237005 | Duplicate | SW-846 5030 | MSV/2048 | SW-846 8260B | MSV/2049 |
| H10060237006 | Trip Blank | SW-846 5030 | MSV/2048 | SW-846 8260B | MSV/2049 |



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

Sample Receipt Checklist

| | | | |
|---------------|------------------|---------------|-----------|
| WorkOrder: | H10060237 | Received By | LOG |
| Date and Time | 06/10/2010 09:30 | Carrier Name: | FEDEXS |
| Temperature: | 3.0°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:

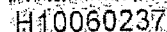
Contact Date & Time:

Client Name Contacted:

Client Instructions:



Analysis Request & Chain of Custody Record



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Scott, LA 70583 (337) 237-4775

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