



3R-426

**SEPTEMBER 2011 ANNUAL GROUNDWATER
MONITORING REPORT**

**CONOCOPHILLIPS SAN JUAN 27-5 No. 34A
RIO ARRIBA COUNTY, NEW MEXICO
API# 30-039-23739
NMOCD# 3R-426**

Prepared For:

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

**MARCH 2012
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This report is printed on recycled paper.**



TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| 1.0 INTRODUCTION | 1 |
| 1.1 BACKGROUND | 1 |
| 2.0 GROUNDWATER MONITORING SUMMARY, SAMPLING METHODOLOGY AND ANALYTICAL RESULTS..... | 3 |
| 2.1 GROUNDWATER MONITORING SUMMARY | 3 |
| 2.2 GROUNDWATER SAMPLING METHODOLOGY..... | 3 |
| 2.3 GROUNDWATER ANALYTICAL RESULTS..... | 3 |
| 3.0 CONCLUSIONS AND RECOMMENDATIONS | 5 |
| 4.0 REFERENCES..... | 6 |

LIST OF FIGURES
(Following Text)

| | |
|----------|--|
| FIGURE 1 | SITE LOCATION MAP |
| FIGURE 2 | SITE PLAN |
| FIGURE 3 | GEOLOGICAL CROSS SECTION |
| FIGURE 4 | SEPTEMBER 2011 GROUNDWATER POTENTIOMETRIC SURFACE MAP |

LIST OF TABLES
(Following Text)

| | |
|---------|--|
| TABLE 1 | SITE HISTORY TIMELINE |
| TABLE 2 | MONITOR WELL SPECIFICATIONS AND GROUNDWATER ELEVATIONS (JULY 2009 - SEPTEMBER 2011) |
| TABLE 3 | GROUNDWATER LABORATORY ANALYTICAL RESULTS SUMMARY (JULY 2009 - SEPTEMBER 2011) |

LIST OF APPENDICES

| | |
|------------|---|
| APPENDIX A | SEPTEMBER 2011 ANNUAL GROUNDWATER SAMPLING FIELD FORMS |
| APPENDIX B | SEPTEMBER 2011 ANNUAL GROUNDWATER LABORATORY ANALYTICAL REPORT |

1.0 INTRODUCTION

This report details the results of annual groundwater monitoring completed by Conestoga-Rovers & Associates (CRA) on September 28, 2011 at the ConocoPhillips Company (ConocoPhillips), San Juan 27-5 No. 34A natural gas well site located on BLM land in Unit Letter E, Section 30, Township 27N, Range 05W, of Rio Arriba County, New Mexico (Site).

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 BACKGROUND

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 excavation approximately 17 feet deep. (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 feet by 49 feet by 20 feet deep area had been excavated prior to Envirotech's arrival on Site. Groundwater was encountered at 20 ft below ground surface (bgs). Envirotech sampled the groundwater for analysis of volatile organic compounds (VOC) using EPA method 8260B (Envirotech, 2009). Laboratory results for benzene were found at a concentration above the NMWQCC standard at 96 micrograms per liter ($\mu\text{g}/\text{L}$) 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 in the south wall 4 additional feet.

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 berm location of the produced water and condensate tanks at the Site (Figure 2). A total of 1,900 cubic yards of impacted soil were removed from the Site and transported to an NMOCD permitted facility located in Farmington, New Mexico. Envirotech recommended the installation of groundwater monitor 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 0.010 polyvinylchloride (PVC) slotted screen was placed in each well.

Tetra Tech began quarterly groundwater quality monitoring of the Site on July 28, 2009. In March of 2011, after eight consecutive quarters of compliance with New Mexico Water Quality Control Commission (NMWQCC) standards for BTEX, Tetra Tech recommended discontinuation of monitoring for BTEX. Monitoring of dissolved manganese was recommended to continue on an annual basis.

On June 15, 2011, Site consulting responsibilities were transferred from Tetra Tech to CRA of Albuquerque, NM. CRA began annual monitoring for dissolved manganese in September 2011.

Site history is outlined in Table 1.

2.0 GROUNDWATER MONITORING SUMMARY, SAMPLING METHODOLOGY AND ANALYTICAL RESULTS

2.1 GROUNDWATER MONITORING SUMMARY

On September 28, 2011 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 elevation data. A groundwater potentiometric surface map is presented as Figure 4, and illustrates that groundwater at the Site flows north-northeast.

2.2 GROUNDWATER SAMPLING METHODOLOGY

Groundwater quality samples were collected from Monitor Wells MW-1, MW-2, MW-3 and MW-4 during the September 28, 2011 groundwater sampling event. Approximately three well volumes were purged from each monitor well prior to sampling. A 1.5-inch polyethylene, dedicated 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 Pace Analytical Services, Inc. of Lenexa, KS. Groundwater samples were analyzed for the presence dissolved manganese by EPA Method 6010. Field sampling forms are included as Appendix A.

2.3 GROUNDWATER ANALYTICAL RESULTS

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

- **Dissolved Manganese**
 - The NMQCC standard for dissolved manganese is 0.2 mg/L. Groundwater collected from Monitor Wells MW-1, MW-2, MW-3 , and MW-4 contained dissolved manganese concentrations of 0.789 mg/L, 0.592 mg/L, 2.03 mg/L, and 0.0461 mg/L, respectively.

The corresponding laboratory analytical report for the September 2011 groundwater sampling event is included as **Appendix B**.

3.0 CONCLUSIONS AND RECOMMENDATIONS

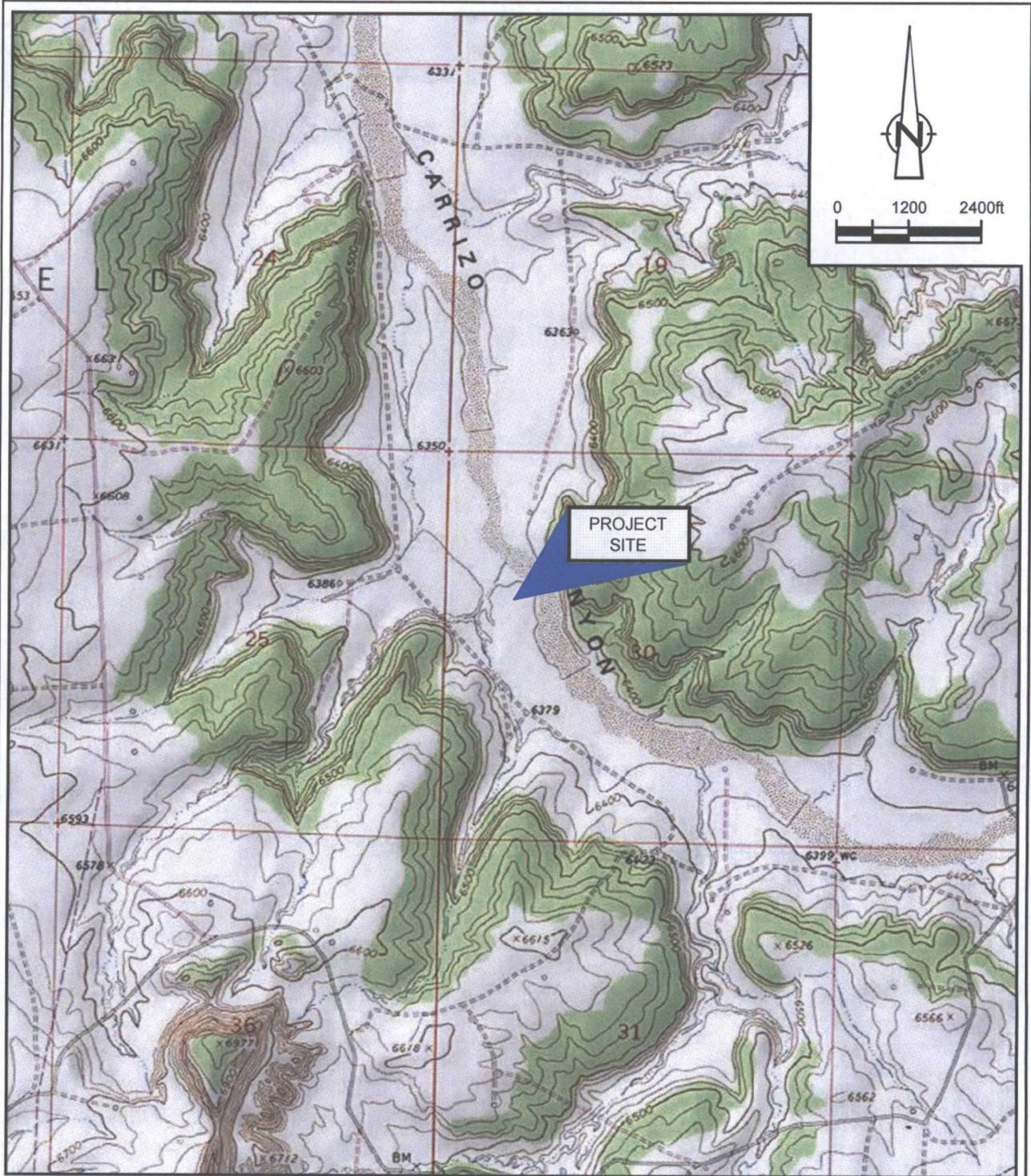
Tetra Tech began quarterly groundwater quality monitoring of the Site on July 28, 2009. In March of 2011, after eight consecutive quarters of compliance with New Mexico Water Quality Control Commission (NMWQCC) standards for BTEX, Tetra Tech recommended discontinuation of monitoring for BTEX. Monitoring of dissolved manganese is conducted on an annual basis.

CRA began annual monitoring for dissolved manganese at the Site on September 28, 2011. Once dissolved manganese concentrations approach compliance levels, CRA will begin sampling on a quarterly basis. When eight consecutive quarters of data within compliance levels has been achieved, remediation Site closure will be requested.

4.0 REFERENCES

Envirotech Incorporated. March 20, 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. p2.

FIGURES



SOURCE: USGS 7.5 MINUTE QUAD
"SANTOS PEAK, NEW MEXICO"

LAT/LONG: 36.5471° NORTH, 107.4066° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO CENTRAL

Figure 1

SITE LOCATION MAP
SAN JUAN 27-5 No. 34A
RIO ARRIBA COUNTY, NEW MEXICO
ConocoPhillips Company





LEGEND

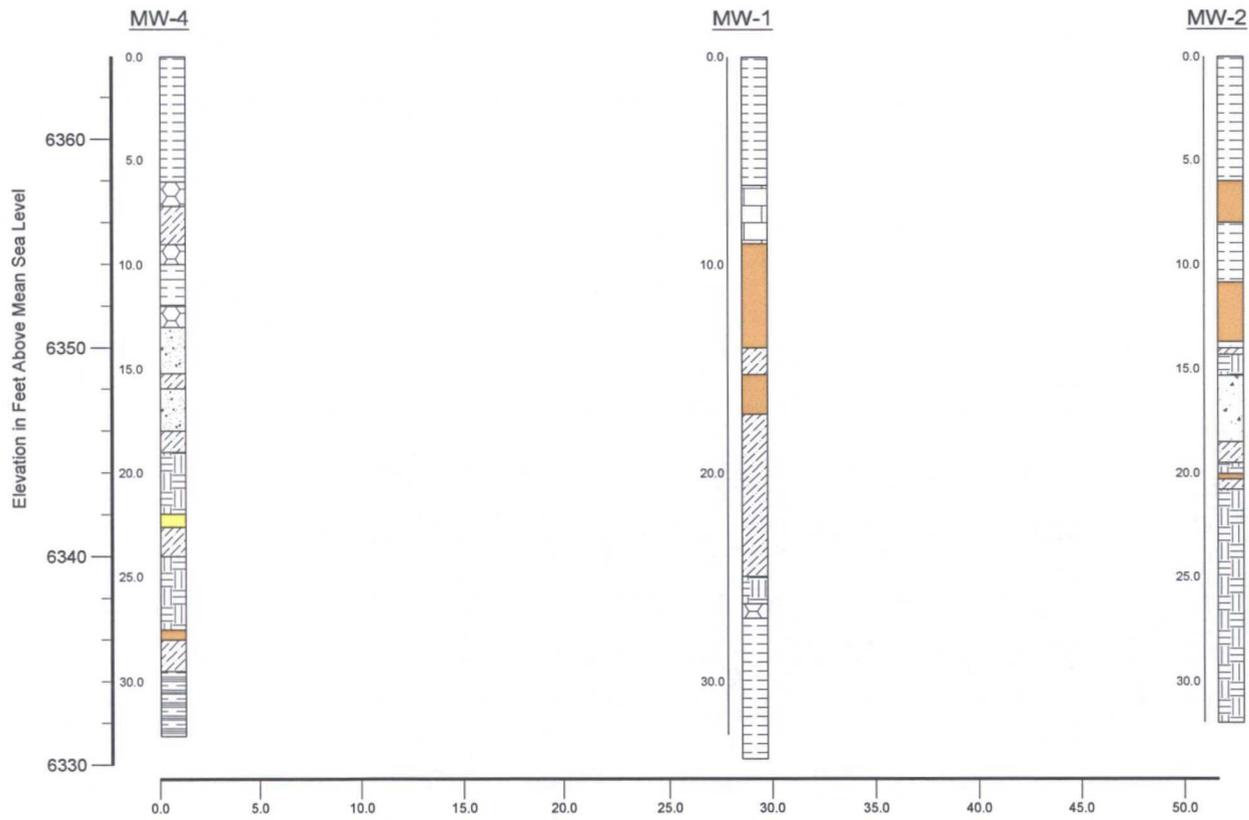
-  Monitor Well Location
-  Wellhead

LAT/LONG: 36.8089° NORTH, 107.9463° WEST
 COORDINATE: NAD83 DATUM, U.S. FOOT
 STATE PLANE ZONE - NEW MEXICO WEST

Figure 2

SITE MAP
SAN JUAN 27-5 No. 34A
SECTION 30, T27N, R5W, RIO ARRIBA COUNTY, NEW MEXICO
ConocoPhillips Company





Lithology Index

- | | | | |
|--|-----------------------------------|--|------------------------|
| | 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 | | |

Figure 3

GEOLOGICAL CROSS SECTION
 SAN JUAN 27-5 No. 34A
 SECTION 30, T27N, R5W, RIO ARRIBA COUNTY, NEW MEXICO
ConocoPhillips Company





LEGEND

-  Monitor Well Location
-  Wellhead
-  (73.73) Groundwater Elevation, Ft
-  — 73.50 — Groundwater Elevation Contour, Ft
-  ← Groundwater Flow Direction

LAT/LONG: 36.8089° NORTH, 107.9463° WEST
 COORDINATE: NAD83 DATUM, U.S. FOOT
 STATE PLANE ZONE - NEW MEXICO WEST

Figure 4

SEPTEMBER 2011 GROUNDWATER POTENTIOMETRIC SURFACE MAP
 SAN JUAN 27-5 No. 34A
 SECTION 30, T27N, R5W, RIO ARRIBA COUNTY, NEW MEXICO
 ConocoPhillips Company



TABLES

TABLE 1

**SITE HISTORY TIMELINE
CONOCOPHILLIPS COMPANY
SAN JUAN 27-5 No. 34A
SAN JUAN COUNTY, NM**

| Date/Time Period | Event/Action | Description/Comments |
|-------------------------------|--|--|
| January 30, 2009 | Site Assessment | Hydrocarbon impacts are visually confirmed during tank removal at the Site. Envirotech Inc. of Farmington, New Mexico (Envirotech) conducted spill assessment and initial soil sampling. |
| March 3, 2009 | Soil Excavation | 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 | Excavation Report | 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 monitor wells at the Site (Envirotech, 2009). |
| April 2, 2009 | Site Assessment | Tetra Tech visits the Site visit to determine placement of proposed groundwater monitor wells. |
| July 15, 2009 & July 16, 2009 | Monitor Well Installation | 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 | Groundwater Monitoring | Baseline quarterly groundwater monitoring event was conducted at the Site by Tetra Tech. |
| September 29, 2009 | Groundwater Monitoring | Quarterly groundwater monitoring event conducted at the Site by Tetra Tech. |
| December 15, 2009 | Groundwater Monitoring | Quarterly groundwater monitoring event conducted at the Site by Tetra Tech. |
| April 8, 2010 | Groundwater Monitoring | Quarterly groundwater monitoring event conducted at the Site by Tetra Tech. |
| June 8, 2010 | Groundwater Monitoring | Quarterly groundwater monitoring event conducted at the Site by Tetra Tech. |
| September 21, 2010 | Groundwater Monitoring | Quarterly groundwater monitoring event conducted at the Site by Tetra Tech. |
| December 15, 2010 | Groundwater Monitoring | Seventh quarterly groundwater monitoring event conducted at the Site by Tetra Tech. Manganese concentrations exceed NMWQCC standards in monitor wells MW-1, MW-2, and MW-3. |
| March 15, 2011 | Groundwater Monitoring | Eighth quarterly groundwater monitoring event conducted at the Site by Tetra Tech. Manganese concentrations exceed NMWQCC standards in monitor wells MW-1, MW-2, and MW-3. After eight consecutive quarters of compliance with BTEX standards, the monitoring schedule is changed to annual sampling for dissolved manganese only. |
| June 15, 2011 | Transfer of Site Consulting Responsibilities | Site consulting responsibilities are transferred from Tetra Tech to Conestoga-Rovers & Associates, Inc. of Albuquerque, NM (CRA). |
| September 28, 2011 | Groundwater Monitoring | Annual monitoring event for dissolved manganese only completed by CRA. |

MONITOR WELL SPECIFICATIONS AND GROUNDWATER ELEVATIONS
 CONOCOPHILLIPS COMPANY
 SAN JUAN 27-5 No. 34A
 SAN JUAN COUNTY, NM

| Well ID | Total Depth (ft bgs) | Screen Interval (ft) | * TOC Elevation (ft) | Date Measured | Depth to Groundwater (ft below TOC) | Relative Groundwater Elevation |
|-----------|----------------------|----------------------|----------------------|---------------|-------------------------------------|--------------------------------|
| MW-1 | 33.13 | 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 |
| | | | | 9/21/2010 | 23.24 | 74.20 |
| | | | | 12/15/2010 | 23.60 | 73.84 |
| | | | | 3/15/2011 | 22.92 | 74.52 |
| MW-2 | 34.29 | 15 - 30 | 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 |
| | | | | 9/21/2010 | 22.78 | 74.00 |
| | | | | 12/15/2010 | 23.13 | 73.65 |
| | | | | 3/15/2011 | 22.44 | 74.34 |
| MW-3 | 33.11 | 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 |
| | | | | 9/21/2010 | 22.90 | 74.34 |
| | | | | 12/15/2010 | 23.27 | 73.97 |
| | | | | 3/15/2011 | 22.55 | 74.69 |
| MW-4 | 33.47 | 17.6 - 32.6 | 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 |
| | | | | 9/21/2010 | 22.67 | 74.56 |
| | | | | 12/15/2010 | 23.03 | 74.20 |
| | | | | 3/15/2011 | 22.35 | 74.88 |
| 9/28/2011 | 23.50 | 73.73 | | | | |

Notes:

ft = Feet

TOC = Top of casing

bgs = below ground surface

*Groundwater elevation is relative to an arbitrary 100 feet

GROUNDWATER LABORATORY ANALYTICAL RESULTS SUMMARY
 CONOCOPHILLIPS COMPANY
 SAN JUAN 27-5 No. 34A
 SAN JUAN COUNTY

| Well ID | Sample ID | Date | Benzene (mg/L) | Toluene (mg/L) | Ethylbenzene (mg/L) | Xylenes (total) (mg/L) | Manganese (dissolved) (mg/L) | Total Dissolved Solids (TDS) (mg/L) |
|---|-------------------------|------------|----------------|----------------|---------------------|------------------------|------------------------------|-------------------------------------|
| MW-1 | MW-1 | 7/28/2009 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | -- | -- |
| | MW-1 | 9/29/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.694 | -- |
| | MW-1 | 12/15/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.576 | -- |
| | MW-1 | 4/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.896 | 640 |
| | MW-1 | 6/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.612 | -- |
| | MW-1 | 9/21/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.784 | -- |
| | MW-1 | 12/15/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.933 | -- |
| | MW-1 | 3/15/2011 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.732 | -- |
| | GW-074934-092811-CM-001 | 9/28/2011 | -- | -- | -- | -- | 0.789 | -- |
| MW-2 | MW-2 | 7/28/2009 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | -- | -- |
| | MW-2 | 9/29/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 1.38 | -- |
| | MW-2 | 12/15/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 1.92 | -- |
| | MW-2 | 4/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.43 | 700 |
| | MW-2 | 6/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.12 | -- |
| | MW-2 | 9/21/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.25 | -- |
| | MW-2 | 12/15/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.17 | -- |
| | MW-2 | 3/15/2011 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.01 | -- |
| | GW-074934-092811-CM-003 | 9/28/2011 | -- | -- | -- | -- | 0.592 | -- |
| MW-3 | MW-3 | 7/28/2009 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | -- | -- |
| | MW-3 | 9/29/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 1.7 | -- |
| | MW-3 | 12/15/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.04 | -- |
| | MW-3 | 4/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.51 | 525 |
| | MW-3 | 6/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.51 | -- |
| | MW-3 | 9/21/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.87 | -- |
| | MW-3 | 12/15/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.69 | -- |
| | MW-3 | 3/15/2011 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 2.01 | -- |
| | GW-074934-092811-JP-002 | 9/28/2011 | -- | -- | -- | -- | 2.03 | -- |
| MW-4 | MW-4 | 7/28/2009 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | -- | -- |
| | MW-4 | 9/29/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.269 | -- |
| | MW-4 | 12/15/2009 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.0579 | -- |
| | MW-4 | 4/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.121 | 684 |
| | MW-4 | 6/8/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.0384 | -- |
| | MW-4 | 9/21/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.0301 | -- |
| | MW-4 | 12/15/2010 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.0088 | -- |
| | MW-4 | 3/15/2011 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.008 | -- |
| | GW-074934-092811-CM-005 | 9/28/2011 | -- | -- | -- | -- | 0.0461 | -- |
| NMWQCC Groundwater Quality Standards | | | 0.01 | 0.75 | 0.75 | 0.62 | 0.2 | 1000 |

Notes:

NMWQCC = New Mexico Water Quality Control Commission

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

< 0.001 = Below laboratory detection limit of 0.001 mg/L

Bold = concentrations that exceed the NMWQCC limits

-- = not analyzed

APPENDIX A

SEPTEMBER 2011 ANNUAL GROUNDWATER SAMPLING FIELD FORMS

WELL SAMPLING FIELD INFORMATION FORM

ITE/PROJECT NAME: San Juan 27-5 #34A JOB# 074934
 SAMPLE ID: GW-074934-092811-CM-001 WELL# MW-1

WELL PURGING INFORMATION

9.28.11 PURGE DATE (MM DD YY) 9.28.11 SAMPLE DATE (MM DD YY) 1055 SAMPLE TIME (24 HOUR) 6.44 WATER VOL. IN CASING (GALLONS) 4.5 ACTUAL VOL. PURGED (GALLONS)

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE) SAMPLING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE)

| | | | | | |
|------------------------|----------|------------------------|-------------------|----------------------|--|
| PURGING DEVICE | <u>G</u> | A - SUBMERSIBLE PUMP | D - GAS LIFT PUMP | G - BAILER | X = _____ |
| SAMPLING DEVICE | <u>G</u> | B - PERISTALTIC PUMP | E - PURGE PUMP | H - WATERA@ | PURGING DEVICE OTHER (SPECIFY) _____ |
| | | C - BLADDER PUMP | F - DIPPER BOTTLE | X - OTHER | X = _____ |
| PURGING MATERIAL | <u>E</u> | A - TEFLON | D - PVC | | X = _____ |
| SAMPLING MATERIAL | <u>E</u> | B - STAINLESS STEEL | E - POLYETHYLENE | | PURGING MATERIAL OTHER (SPECIFY) _____ |
| | | C - POLYPROPYLENE | X - OTHER | | X = _____ |
| PURGE TUBING | <u>C</u> | A - TEFLON | D - POLYPROPYLENE | G - COMBINATION | X = _____ |
| SAMPLING TUBING | <u>C</u> | B - TYGON | E - POLYETHYLENE | TEFLON/POLYPROPYLENE | PURGE TUBING OTHER (SPECIFY) _____ |
| | | C - ROPE | F - SILICONE | X - OTHER | X = _____ |
| FILTERING DEVICES 0.45 | <u>A</u> | A - IN-LINE DISPOSABLE | B - PRESSURE | C - VACUUM | <u>0.45 micron for metals</u> |

FIELD MEASUREMENTS

| | | | | | |
|----------------|--------------|--------|-----------------------|--------------|--------|
| DEPTH TO WATER | <u>24.10</u> | (feet) | WELL ELEVATION | <u>97.44</u> | (feet) |
| WELL DEPTH | <u>33.13</u> | (feet) | GROUNDWATER ELEVATION | <u>73.34</u> | (feet) |

| TEMPERATURE | pH | TDS | CONDUCTIVITY | ORP | VOLUME |
|-------------------|-------------------|--------------------|--------------------|-------------------|------------------|
| <u>13.44</u> (°C) | <u>7.05</u> (std) | <u>0.466</u> (g/L) | <u>558</u> (µS/cm) | <u>133.7</u> (mV) | <u>3.5</u> (gal) |
| <u>13.12</u> (°C) | <u>7.05</u> (std) | <u>0.465</u> (g/L) | <u>553</u> (µS/cm) | <u>133.1</u> (mV) | <u>4.0</u> (gal) |
| <u>13.57</u> (°C) | <u>7.03</u> (std) | <u>0.471</u> (g/L) | <u>560</u> (µS/cm) | <u>133.9</u> (mV) | <u>4.5</u> (gal) |
| | | | | | |
| | | | | | |

FIELD COMMENTS

SAMPLE APPEARANCE: cloudy ODOR: none COLOR: lt. brown SHEEN Y N
 WEATHER CONDITIONS: TEMPERATURE 85° WINDY Y N PRECIPITATION Y N (IF Y TYPE) _____
 SPECIFIC COMMENTS: _____

Volume = 9.03 x .16 = 1.44 x 3 = 4.3

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

9.28.11 DATE Jason Pless PRINT _____ SIGNATURE

WELL SAMPLING FIELD INFORMATION FORM

ITE/PROJECT NAME: San Juan 27-5#34A **JOB#** 074934
SAMPLE ID: GW-074934-092811-CM-003 **WELL#** MW.2

WELL PURGING INFORMATION

9.28.11 9.28.11 1200 1.71 4.25
PURGE DATE (MM DD YY) SAMPLE DATE (MM DD YY) SAMPLE TIME (24 HOUR) WATER VOL. IN CASING (GALLONS) ACTUAL VOL. PURGED (GALLONS)

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE) SAMPLING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE)

| | | | | | |
|------------------------|----------|------------------------|-------------------|----------------------|---|
| PURGING DEVICE | <u>G</u> | A - SUBMERSIBLE PUMP | D - GAS LIFT PUMP | G - BAILER | X = _____ |
| | | B - PERISTALTIC PUMP | E - PURGE PUMP | H - WATERA® | PURGING DEVICE OTHER (SPECIFY) _____ |
| SAMPLING DEVICE | <u>G</u> | C - BLADDER PUMP | F - DIPPER BOTTLE | X - OTHER | X = _____ |
| | | | | | SAMPLING DEVICE OTHER (SPECIFY) _____ |
| PURGING MATERIAL | <u>E</u> | A - TEFLON | D - PVC | | X = _____ |
| | | B - STAINLESS STEEL | E - POLYETHYLENE | | PURGING MATERIAL OTHER (SPECIFY) _____ |
| SAMPLING MATERIAL | <u>E</u> | C - POLYPROPYLENE | X - OTHER | | X = _____ |
| | | | | | SAMPLING MATERIAL OTHER (SPECIFY) _____ |
| PURGE TUBING | <u>C</u> | A - TEFLON | D - POLYPROPYLENE | G - COMBINATION | X = _____ |
| | | B - TYGON | E - POLYETHYLENE | TEFLON/POLYPROPYLENE | PURGE TUBING OTHER (SPECIFY) _____ |
| SAMPLING TUBING | <u>C</u> | C - ROPE | F - SILICONE | X - OTHER | X = _____ |
| | | | | | SAMPLING TUBING OTHER (SPECIFY) _____ |
| FILTERING DEVICES 0.45 | <u>A</u> | A - IN-LINE DISPOSABLE | B - PRESSURE | C - VACUUM | |

FIELD MEASUREMENTS

| | | | | | |
|-------------------|-------------------|--------------------|-----------------------|-------------------|-------------------|
| DEPTH TO WATER | <u>23.62</u> | (feet) | WELL ELEVATION | <u>96.78</u> | (feet) |
| WELL DEPTH | <u>34.29</u> | (feet) | GROUNDWATER ELEVATION | <u>73.16</u> | (feet) |
| TEMPERATURE | pH | TDS | CONDUCTIVITY | ORP | VOLUME |
| <u>13.22</u> (°C) | <u>7.32</u> (std) | <u>0.545</u> (g/L) | <u>649</u> (µS/cm) | <u>124.5</u> (mV) | <u>3.75</u> (gal) |
| <u>13.58</u> (°C) | <u>7.23</u> (std) | <u>0.540</u> (g/L) | <u>650</u> (µS/cm) | <u>128.5</u> (mV) | <u>7.25</u> (gal) |
| | | | | | |
| | | | | | |
| | | | | | |

FIELD COMMENTS

SAMPLE APPEARANCE: cloudy ODOR: None COLOR: light brown SHEEN Y/ N
 WEATHER CONDITIONS: TEMPERATURE ~85° WINDY Y/ N PRECIPITATION Y/ N (IF Y TYPE) _____
 SPECIFIC COMMENTS: Collect duplicate GW-074934-092811-CM-4 @ 1205

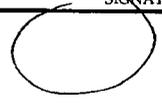
Volume = 10.67 x .16 = 1.71 x 3 = 5.12

bailed dry @ 2.25 gallons. second attempt 1.25 gallons - total 3.5 gal.

9.28.11
DATE

Jason P. [Signature]
PRINT

[Signature]
SIGNATURE



WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME: San Juan 27-5 #34A JOB# 074934
 SAMPLE ID: G10-074934-092811-JP-002 WELL# MW-3

WELL PURGING INFORMATION

PURGE DATE (MM DD YY) 9.28.11 SAMPLE DATE (MM DD YY) 9.28.11 SAMPLE TIME (24 HOUR) 1110 WATER VOL. IN CASING (GALLONS) 1.5 ACTUAL VOL. PURGED (GALLONS) 4.75

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE) SAMPLING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE)

| | | | | | |
|------------------------|----------|------------------------|-------------------|----------------------|---|
| PURGING DEVICE | <u>G</u> | A - SUBMERSIBLE PUMP | D - GAS LIFT PUMP | G - BAILER | X = _____ |
| | | B - PERISTALTIC PUMP | E - PURGE PUMP | H - WATERRA® | PURGING DEVICE OTHER (SPECIFY) _____ |
| SAMPLING DEVICE | <u>G</u> | C - BLADDER PUMP | F - DIPPER BOTTLE | X - OTHER | X = _____ |
| | | | | | SAMPLING DEVICE OTHER (SPECIFY) _____ |
| PURGING MATERIAL | <u>E</u> | A - TEFLON | D - PVC | | X = _____ |
| | | B - STAINLESS STEEL | E - POLYETHYLENE | | PURGING MATERIAL OTHER (SPECIFY) _____ |
| SAMPLING MATERIAL | <u>E</u> | C - POLYPROPYLENE | X - OTHER | | X = _____ |
| | | | | | SAMPLING MATERIAL OTHER (SPECIFY) _____ |
| PURGE TUBING | <u>C</u> | A - TEFLON | D - POLYPROPYLENE | G - COMBINATION | X = _____ |
| | | B - TYGON | E - POLYETHYLENE | TEFLON/POLYPROPYLENE | PURGE TUBING OTHER (SPECIFY) _____ |
| SAMPLING TUBING | <u>C</u> | C - ROPE | F - SILICONE | X - OTHER | X = _____ |
| | | | | | SAMPLING TUBING OTHER (SPECIFY) _____ |
| FILTERING DEVICES 0.45 | <u>A</u> | A - IN-LINE DISPOSABLE | B - PRESSURE | C - VACUUM | <u>0.45 micron for metals</u> |

FIELD MEASUREMENTS

| | | | | | |
|-------------------|-------------------|--------------------|-----------------------|-------------------|-------------------|
| DEPTH TO WATER | <u>23.73</u> | (feet) | WELL ELEVATION | <u>97.24</u> | (feet) |
| WELL DEPTH | <u>33.11</u> | (feet) | GROUNDWATER ELEVATION | <u>73.51</u> | (feet) |
| TEMPERATURE | pH | TDS | CONDUCTIVITY | ORP | VOLUME |
| <u>12.89</u> (°C) | <u>7.05</u> (std) | <u>0.448</u> (g/L) | <u>529</u> (µS/cm) | <u>130.2</u> (mV) | <u>4.25</u> (gal) |
| <u>12.85</u> (°C) | <u>7.06</u> (std) | <u>0.451</u> (g/L) | <u>533</u> (µS/cm) | <u>126.0</u> (mV) | <u>4.5</u> (gal) |
| <u>12.82</u> (°C) | <u>7.03</u> (std) | <u>0.447</u> (g/L) | <u>528</u> (µS/cm) | <u>123.7</u> (mV) | <u>4.75</u> (gal) |
| | | | | | |
| | | | | | |

FIELD COMMENTS

SAMPLE APPEARANCE: cloudy ODOR: None COLOR: tan SHEEN Y/ N
 WEATHER CONDITIONS: TEMPERATURE ~80° WINDY Y/ N PRECIPITATION Y/ N (IF Y TYPE) _____
 SPECIFIC COMMENTS: _____

Volume = 9.38 x .16 = 1.5 x 3 = 4.5

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

DATE 9.28.11 PRINT Joann P. [Signature] SIGNATURE [Signature]

WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME: San Juan 27-5 #34A JOB# 074934
 SAMPLE ID: GW-074934-092011-CM-005 WELL# MW-4

| | | | | |
|--------------------------|---------------------------|--------------------------|-----------------------------------|---------------------------------|
| <u>9.28.11</u> | <u>9.28.11</u> | <u>1220</u> | <u>1.59</u> | <u>3.5</u> |
| PURGE DATE (MM DD YY) | SAMPLE DATE (MM DD YY) | SAMPLE TIME (24 HOUR) | WATER VOL. IN CASING (GALLONS) | ACTUAL VOL. PURGED (GALLONS) |

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE)
 SAMPLING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE)

| | | | | | |
|-------------------|----------|----------------------|-------------------|----------------------|-----------------------------------|
| PURGING DEVICE | <u>G</u> | A - SUBMERSIBLE PUMP | D - GAS LIFT PUMP | G - BAILER | X = _____ |
| | | B - PERISTALTIC PUMP | E - PURGE PUMP | H - WATERA® | PURGING DEVICE OTHER (SPECIFY) |
| SAMPLING DEVICE | <u>G</u> | C - BLADDER PUMP | F - DIPPER BOTTLE | X - OTHER | X = _____ |
| | | | | | SAMPLING DEVICE OTHER (SPECIFY) |
| PURGING MATERIAL | <u>E</u> | A - TEFLON | D - PVC | | X = _____ |
| | | B - STAINLESS STEEL | E - POLYETHYLENE | | PURGING MATERIAL OTHER (SPECIFY) |
| SAMPLING MATERIAL | <u>E</u> | C - POLYPROPYLENE | X - OTHER | | X = _____ |
| | | | | | SAMPLING MATERIAL OTHER (SPECIFY) |
| PURGE TUBING | <u>C</u> | A - TEFLON | D - POLYPROPYLENE | G - COMBINATION | X = _____ |
| | | B - TYGON | E - POLYETHYLENE | TEFLON/POLYPROPYLENE | PURGE TUBING OTHER (SPECIFY) |
| SAMPLING TUBING | <u>C</u> | C - ROPE | F - SILICONE | X - OTHER | X = _____ |
| | | | | | SAMPLING TUBING OTHER (SPECIFY) |

FILTERING DEVICES 0.45 A A - IN-LINE DISPOSABLE B - PRESSURE C - VACUUM 0.45 micron for metals

FIELD MEASUREMENTS

| | | | | | |
|----------------|--------------|--------|-----------------------|--------------|--------|
| DEPTH TO WATER | <u>23.50</u> | (feet) | WELL ELEVATION | <u>97.23</u> | (feet) |
| WELL DEPTH | <u>33.47</u> | (feet) | GROUNDWATER ELEVATION | <u>73.73</u> | (feet) |

| | | | | | |
|--------------|-------------|--------------|--------------|--------------|-------------|
| TEMPERATURE | pH | TDS | CONDUCTIVITY | ORP | VOLUME |
| <u>13.16</u> | <u>7.90</u> | <u>0.574</u> | <u>684</u> | <u>136.3</u> | <u>3.25</u> |
| (°C) | (std) | (g/L) | (µS/cm) | (mV) | (gal) |
| <u>13.37</u> | <u>7.80</u> | <u>0.569</u> | <u>680</u> | <u>138.9</u> | <u>3.5</u> |
| (°C) | (std) | (g/L) | (µS/cm) | (mV) | (gal) |
| | | | | | |
| (°C) | (std) | (g/L) | (µS/cm) | (mV) | (gal) |
| | | | | | |
| (°C) | (std) | (g/L) | (µS/cm) | (mV) | (gal) |

FIELD COMMENTS

SAMPLE APPEARANCE: _____ ODOR: _____ COLOR: _____ SHEEN Y N
 WEATHER CONDITIONS: TEMPERATURE ~85° WINDY Y N PRECIPITATION Y N (TYPE) _____
 SPECIFIC COMMENTS: _____

Volume = 9.97 x .16 = 1.59 x 3 = 4.80
Bailed dry @ 1.75 gallons. 2nd attempt bailed dry @ 1.85 gal. Total = 3 gal.

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS
9.28.11 John P. [Signature]
 DATE PRINT SIGNATURE

APPENDIX B

SEPTEMBER 2011 ANNUAL GROUNDWATER LABORATORY ANALYTICAL REPORT



Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 06, 2011

Christine Matthews
CRA
6121 Indian School Rd NE
Suite 200
Albuquerque, NM 87110

RE: Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 30, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dianna Meier

dianna.meier@pacelabs.com
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa
Angela Bown, COP Conestoga-Rovers & Associa
Cassie Brown, COP Conestoga-Rovers & Associa



REPORT OF LABORATORY ANALYSIS

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(913)599-5665

CERTIFICATIONS

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

REPORT OF LABORATORY ANALYSIS

Page 2 of 12

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SAMPLE SUMMARY

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|-------------|-------------------------|--------|----------------|----------------|
| 60107270001 | GW-074934-092811-CM-001 | Water | 09/28/11 10:55 | 09/30/11 09:05 |
| 60107270002 | GW-074934-092811-JP-002 | Water | 09/28/11 11:10 | 09/30/11 09:05 |
| 60107270003 | GW-074934-092811-CM-003 | Water | 09/28/11 12:00 | 09/30/11 09:05 |
| 60107270004 | GW-074934-092811-CM-005 | Water | 09/28/11 12:20 | 09/30/11 09:05 |

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SAMPLE ANALYTE COUNT

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|-------------------------|----------|----------|-------------------|
| 60107270001 | GW-074934-092811-CM-001 | EPA 6010 | JDH | 1 |
| 60107270002 | GW-074934-092811-JP-002 | EPA 6010 | JDH | 1 |
| 60107270003 | GW-074934-092811-CM-003 | EPA 6010 | JDH | 1 |
| 60107270004 | GW-074934-092811-CM-005 | EPA 6010 | JDH | 1 |

REPORT OF LABORATORY ANALYSIS

Page 4 of 12

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PROJECT NARRATIVE

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

Method: EPA 6010
Description: 6010 MET ICP, Dissolved
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: October 06, 2011

General Information:

4 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS



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ANALYTICAL RESULTS

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

| Sample: GW-074934-092811-CM-001 | Lab ID: 60107270001 | Collected: 09/28/11 10:55 | Received: 09/30/11 09:05 | Matrix: Water | | | | | |
|---|---------------------|---------------------------|--------------------------|---------------|----------------|----------------|-----------|------|--|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual | |
| 6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | | |
| Manganese, Dissolved | 789 ug/L | | 5.0 | 1 | 10/03/11 13:37 | 10/04/11 17:00 | 7439-96-5 | | |



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ANALYTICAL RESULTS

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

| Sample: GW-074934-092811-JP-002 | Lab ID: 60107270002 | Collected: 09/28/11 11:10 | Received: 09/30/11 09:05 | Matrix: Water | | | | |
|--|--|---------------------------|--------------------------|---------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Manganese, Dissolved | 2030 ug/L | | 5.0 | 1 | 10/03/11 13:37 | 10/04/11 17:11 | 7439-96-5 | |



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ANALYTICAL RESULTS

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|----------|-------|--------------|----|----------------|----------------|-----------|------|
| Sample: GW-074934-092811-CM-003 Lab ID: 60107270003 Collected: 09/28/11 12:00 Received: 09/30/11 09:05 Matrix: Water | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | |
| 6010 MET ICP, Dissolved | | | | | | | | |
| Manganese, Dissolved | 592 ug/L | | 5.0 | 1 | 10/03/11 13:37 | 10/04/11 17:13 | 7439-96-5 | |



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ANALYTICAL RESULTS

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

| Sample: GW-074934-092811-CM-005 | Lab ID: 60107270004 | Collected: 09/28/11 12:20 | Received: 09/30/11 09:05 | Matrix: Water | | | | |
|--|--|---------------------------|--------------------------|---------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Manganese, Dissolved | 46.1 | ug/L | 5.0 | 1 | 10/03/11 13:37 | 10/04/11 17:15 | 7439-96-5 | |



QUALITY CONTROL DATA

Project: San Juan 27-5 No. 34A
 Pace Project No.: 60107270

QC Batch: MPRP/15526 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
 Associated Lab Samples: 60107270001, 60107270002, 60107270003, 60107270004

METHOD BLANK: 885398 Matrix: Water
 Associated Lab Samples: 60107270001, 60107270002, 60107270003, 60107270004

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|----------------------|-------|--------------|-----------------|----------------|------------|
| Manganese, Dissolved | ug/L | ND | 5.0 | 10/04/11 16:56 | |

LABORATORY CONTROL SAMPLE: 885399

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|----------------------|-------|-------------|------------|-----------|--------------|------------|
| Manganese, Dissolved | ug/L | 1000 | 969 | 97 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 885400 885401

| Parameter | 60107270001 | | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | Max RPD | Qual |
|----------------------|-------------|--------|----------------|-----------------|-----------|------------|----------|-----------|--------------|---------|------|
| | Units | Result | | | | | | | | | |
| Manganese, Dissolved | ug/L | 789 | 1000 | 1000 | 1750 | 1720 | 96 | 93 | 75-125 | 2 20 | |



QUALIFIERS

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: San Juan 27-5 No. 34A
Pace Project No.: 60107270

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|-------------------------|-----------------|------------|-------------------|------------------|
| 60107270001 | GW-074934-092811-CM-001 | EPA 3010 | MPRP/15526 | EPA 6010 | ICP/13479 |
| 60107270002 | GW-074934-092811-JP-002 | EPA 3010 | MPRP/15526 | EPA 6010 | ICP/13479 |
| 60107270003 | GW-074934-092811-CM-003 | EPA 3010 | MPRP/15526 | EPA 6010 | ICP/13479 |
| 60107270004 | GW-074934-092811-CM-005 | EPA 3010 | MPRP/15526 | EPA 6010 | ICP/13479 |



Sample Condition Upon Receipt – ESI Tech Specs

Client Name: COPCRA NM

Project #: 60107270

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: 876800246808 Pace Shipping Label Used? Yes No

| |
|-----------------------------|
| Optional |
| Proj Due Date: <u>10/12</u> |
| Proj Name: <u>San Thom</u> |

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

27-5 NO. 3AA

Packing Material: Bubble Wrap Bubble Bags Foam None Other TPIC

Thermometer Used: T-191 / T-194 Type of Ice: Wet Blue None Samples received on ice, cooling process has begun. (circle one)

Cooler Temperature: 0.5

Date and initials of person examining contents: PL 4-30-11

Temperature should be above freezing to 6°C

| | | |
|--|--|-----------------------------|
| Chain of Custody present: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 1. |
| Chain of Custody filled out: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 2. |
| Chain of Custody relinquished: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 3. |
| Sampler name & signature on COC: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 4. |
| Samples arrived within holding time: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 5. |
| Short Hold Time analyses (<72hr): | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 6. |
| Rush Turn Around Time requested: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 7. |
| Sufficient volume: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 8. |
| Correct containers used: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| -Pace containers used: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 9. |
| Containers intact: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 10. |
| Unpreserved 5035A soils frozen w/in 48hrs? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 11. |
| Filtered volume received for dissolved tests? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 12. |
| Sample labels match COC: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| -Includes date/time/ID/analyses Matrix: | <u>WT</u> | 13. |
| All containers needing preservation have been checked. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| All containers needing preservation are found to be in compliance with EPA recommendation. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 14. |
| Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Initial when completed |
| Trip Blank present: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Lot # of added preservative |
| Pace Trip Blank lot # (if purchased): | | 15. |
| Headspace in VOA vials (>6mm): | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 16. |
| Project sampled in USDA Regulated Area: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 17. List State: |

Client Notification/ Resolution: Copy COC to Client? Y N Field Data Required? Y N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

| | |
|--|--------|
| Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps. | |
| Start: <u>1120</u> | Start: |
| End: <u>1124</u> | End: |
| Temp: | Temp: |

Project Manager Review: CMK for DUMABOLI Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the NCDENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).