

3R - 426

2012 AGWMR

02/19/2013



**CONESTOGA-ROVERS
& ASSOCIATES**

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February 19, 2013

Reference No. 074925, 074927, 074928
074929, 074932, 074934
075038

Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 South Saint Francis Dr.
Santa Fe, NM 87505

Dear Mr. von Gonten:

Re: Groundwater Monitoring Reports - 2012

Enclosed, please find a copy of the reports listed below compiled by Conestoga-Rovers and Associates, Inc.

- ✓ 3R434 1. Farmington B Com No. 1E Annual Groundwater Monitoring Report - September 2012
- ✓ 3R434 2. Faye Burdette No. 1 Annual Groundwater Monitoring Report - September 2012
- ✓ 3R469 3. Hampton No. 4M Annual Groundwater Monitoring Report - September 2012
- ✓ 3R431 4. Howell K No. 1 Annual Groundwater Monitoring Report - September 2012
- ✓ 3R471 5. Johnston Federal No. 4 Metering Station Annual Groundwater Monitoring Report - September 2012
- ✓ 3R426 6. San Juan 27-5 No. 34A Annual Groundwater Monitoring Report - September 2012
- 3R428 7. Sategna No. 2E Quarterly Groundwater Monitoring Report - September 2012

If you have any questions or require additional information, please contact me at (505) 884-0672 or keblanchard@craworld.com.

Sincerely,
CONESTOGA-ROVERS & ASSOCIATES

Kelly E. Blanchard
Project Manager

JP/cjg/1
Encl.

cc: Brandon Powell, NMOCD
Terry Lauck, ConocoPhillips (electronic only)

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2013 FEB 20 AM 11:19

Equal
Employment Opportunity
Employer



SEPTEMBER 2012 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

JANUARY 2012
REF. NO. 074934 (3)
This report is printed on recycled paper.

2012 FEB 20 A 11: 19

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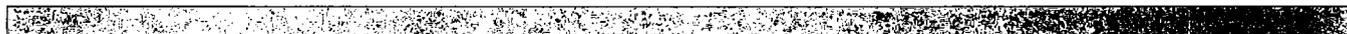


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1.0 INTRODUCTION

This report details the results of annual groundwater monitoring completed by Conestoga-Rovers & Associates (CRA) on September 24, 2012 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 (VOCs) using EPA method 8260B (Envirotech, 2009). Laboratory results for benzene were found at a concentration above the New Mexico Water Quality Control Commission (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 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 24, 2012 groundwater elevation measurements were obtained for Monitor Wells MW-1, MW-2, MW-3 and MW-4 using an oil/water interface probe. **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-northwest.

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 24, 2012 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 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 and MW-3 contained dissolved manganese concentrations of 0.76 mg/L, and 1.2 mg/L, respectively.

The corresponding laboratory analytical report for the September 2012 groundwater sampling event is included as **Appendix B**.

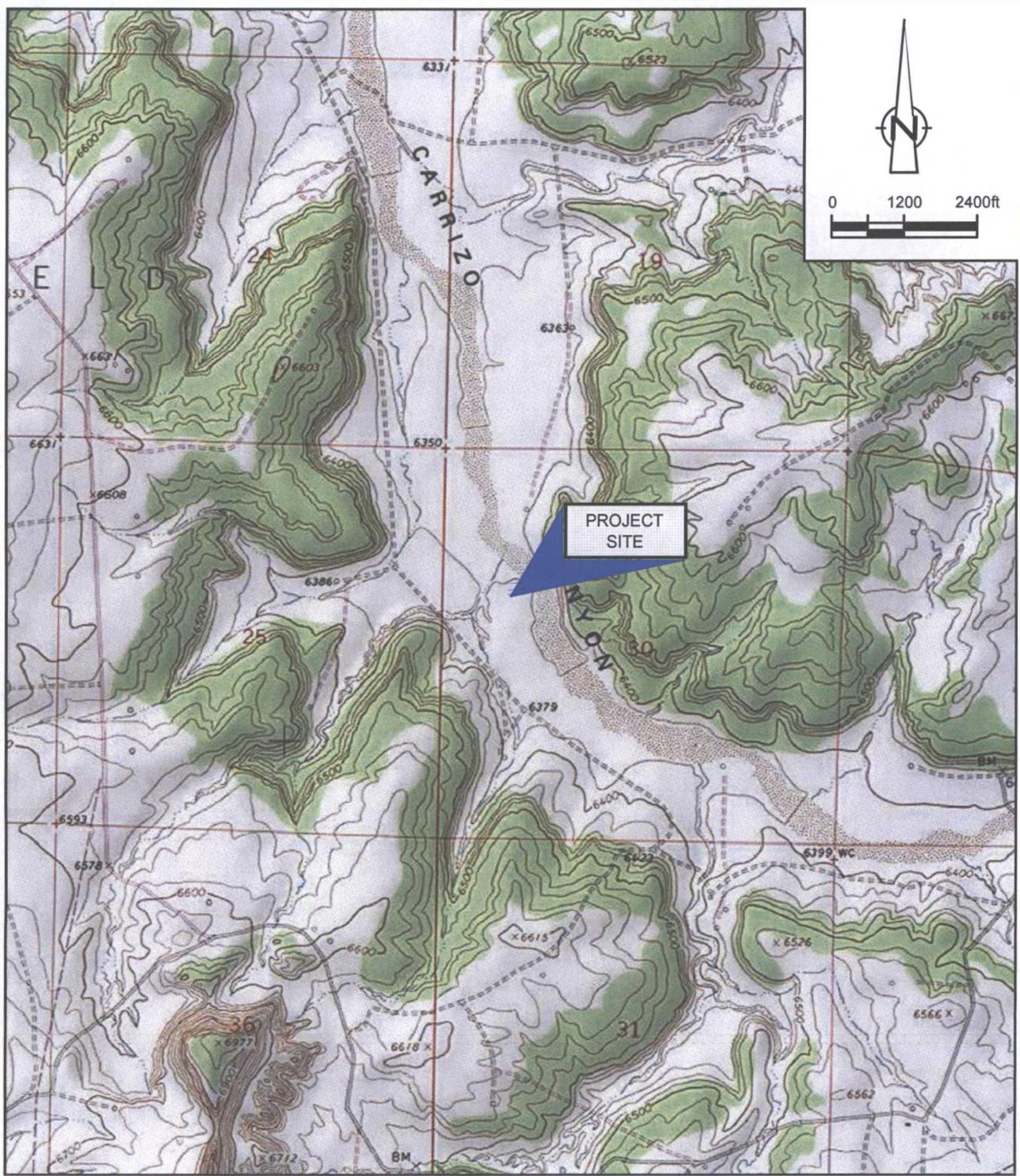
3.0 CONCLUSIONS AND RECOMMENDATIONS

In March of 2011, after eight consecutive quarters of compliance with NMWQCC standards for BTEX, Tetra Tech recommended discontinuation of monitoring for BTEX. Monitoring of dissolved manganese continues to be conducted on an annual basis. Remediation Site closure will be requested when groundwater quality results indicate that all monitored groundwater quality parameters are consistently below NMWQCC groundwater quality standards, are stable, or are representative of background conditions at the Site.

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



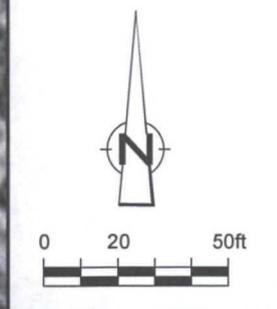
SOURCE: USGS 7.5 MINUTE QUAD
"SANTOS PEAK, NEW MEXICO"

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

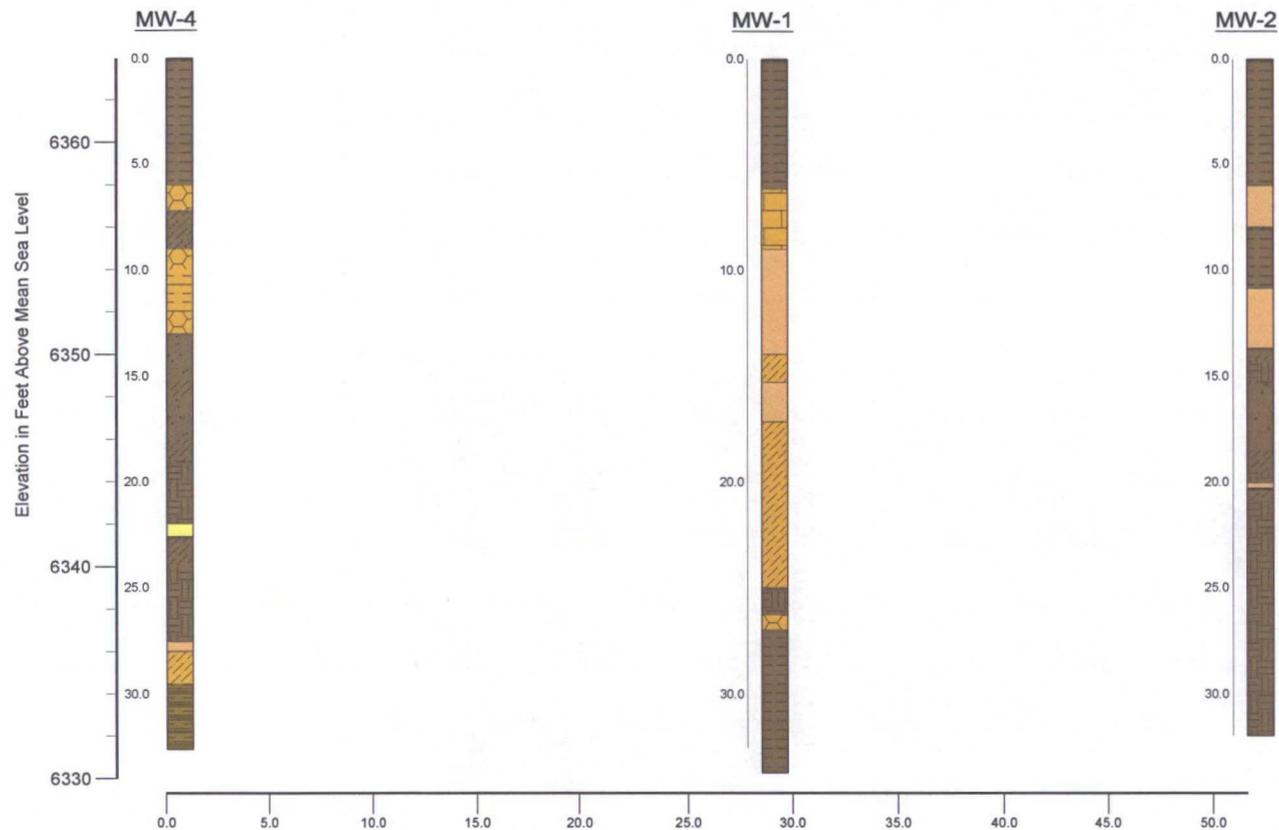
-  Monitor Well Location
-  Wellhead

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
-  (72.61) Groundwater Elevation, Ft
-  — 72.50 — 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 2012 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
RIO ARRIBA COUNTY, NM**

<i>Date/Time Period</i>	<i>Event/Action</i>	<i>Description/Comments</i>
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.
September 24, 2012	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
RIO ARRIBA 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
				9/28/2011	24.10	73.34
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
				9/28/2011	23.62	73.16
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
				9/28/2011	23.73	73.51
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
9/24/2012	24.62	72.61				

Notes:

ft = Feet

TOC = Top of casing

bgs = below ground surface

*Groundwater elevation is relative to an arbitrary 100 feet

TABLE 3

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

Well ID	Sample ID	Date	Sample Type	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	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--
	MW-1	9/29/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.694	--
	MW-1	12/15/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.576	--
	MW-1	4/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.896	640
	MW-1	6/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.612	--
	MW-1	9/21/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.784	--
	MW-1	12/15/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.933	--
	MW-1	3/15/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.732	--
	GW-074934-092811-CM-001	9/28/2011	(orig)	--	--	--	--	0.789	--
GW-074934-092412-CM-MW-1	9/24/2012	(orig)	--	--	--	--	0.76	--	
MW-2	MW-2	7/28/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--
	MW-2	9/29/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	1.38	--
	MW-2	12/15/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	1.92	--
	MW-2	4/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.43	700
	MW-2	6/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.12	--
	MW-2	9/21/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.25	--
	MW-2	12/15/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.17	--
	MW-2	3/15/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.01	--
	GW-074934-092811-CM-003	9/28/2011	(orig)	--	--	--	--	0.592	--
GW-074934-092412-CM-MW-2	9/24/2012	(orig)	--	--	--	--	0.12	--	
GW-074934-092412-CM-DUP	9/24/2012	(orig)	--	--	--	--	0.13	--	
MW-3	MW-3	7/28/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--
	MW-3	9/29/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	1.7	--
	MW-3	12/15/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.04	--
	MW-3	4/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.51	525
	MW-3	6/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.51	--
	MW-3	9/21/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.87	--
	MW-3	12/15/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.69	--
	MW-3	3/15/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	2.01	--
	GW-074934-092811-JP-002	9/28/2011	(orig)	--	--	--	--	2.03	--
GW-074934-092412-CM-MW-3	9/24/2012	(orig)	--	--	--	--	1.2	--	

TABLE 3

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

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Manganese (dissolved) (mg/L)	Total Dissolved Solids (TDS) (mg/L)
MW-4	MW-4	7/28/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--
	MW-4	9/29/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.269	--
	MW-4	12/15/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.0579	--
	MW-4	4/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.121	684
	MW-4	6/8/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.0384	--
	MW-4	9/21/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.0301	--
	MW-4	12/15/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.0088	--
	MW-4	3/15/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.008	--
	GW-074934-092811-CM-005	9/28/2011	(orig)	--	--	--	--	0.0461	--
GW-074934-092412-CM-MW-4	9/24/2012	(orig)	--	--	--	--	0.026	--	
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 2012 ANNUAL GROUNDWATER SAMPLING FIELD FORMS

WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME: SS 27-5 311A JOB# 074934
 SAMPLE ID: GHO 74934-092412-01-MW-2 WELL# MW-2

WELL PURGING INFORMATION

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	<input checked="" type="checkbox"/> G	A - SUBMERSIBLE PUMP	<input type="checkbox"/> D	D - GAS LIFT PUMP	<input type="checkbox"/> G	G - BAILER	X= _____
		B - PERISTALTIC PUMP	<input type="checkbox"/> E	E - PURGE PUMP	<input type="checkbox"/> H	H - WATERA®	PURGING DEVICE OTHER (SPECIFY) _____
SAMPLING DEVICE	<input checked="" type="checkbox"/> G	C - BLADDER PUMP	<input type="checkbox"/> F	F - DIPPER BOTTLE	<input type="checkbox"/> X	X - OTHER	X= _____
							SAMPLING DEVICE OTHER (SPECIFY) _____
PURGING MATERIAL	<input checked="" type="checkbox"/> E	A - TEFLON	<input type="checkbox"/> D	D - PVC			X= _____
		B - STAINLESS STEEL	<input type="checkbox"/> E	E - POLYETHYLENE			PURGING MATERIAL OTHER (SPECIFY) _____
SAMPLING MATERIAL	<input checked="" type="checkbox"/> E	C - POLYPROPYLENE	<input type="checkbox"/> X	X - OTHER			X= _____
							SAMPLING MATERIAL OTHER (SPECIFY) _____
PURGE TUBING	<input checked="" type="checkbox"/> C	A - TEFLON	<input type="checkbox"/> D	D - POLYPROPYLENE	<input type="checkbox"/> G	G - COMBINATION TEFLON/POLYPROPYLENE	X= _____
		B - TYGON	<input type="checkbox"/> E	E - POLYETHYLENE			PURGE TUBING OTHER (SPECIFY) _____
SAMPLING TUBING	<input checked="" type="checkbox"/> C	C - ROPE	<input type="checkbox"/> F	F - SILICONE	<input type="checkbox"/> X	X - OTHER	X= _____
							SAMPLING TUBING OTHER (SPECIFY) _____
FILTERING DEVICES 0.45	<input checked="" type="checkbox"/> A	A - IN-LINE DISPOSABLE	<input type="checkbox"/> B	B - PRESSURE	<input type="checkbox"/> C	C - VACUUM	<u>45 for metals on ly</u>

FIELD MEASUREMENTS

DEPTH TO WATER: (feet) WELL ELEVATION: (feet)
 WELL DEPTH: (feet) GROUNDWATER ELEVATION: (feet)

TEMPERATURE	pH	TDS	CONDUCTIVITY	ORP	VOLUME
<input type="text" value="12.84"/> (°C)	<input type="text" value="6.85"/> (std)	<input type="text" value="0.560"/> (g/L)	<input type="text" value="661"/> (µS/cm)	<input type="text" value="128.3"/> (mV)	<input type="text" value="3.0"/> (gal)
<input type="text"/> (°C)	<input type="text"/> (std)	<input type="text"/> (g/L)	<input type="text"/> (µS/cm)	<input type="text"/> (mV)	<input type="text"/> (gal)
<input type="text"/> (°C)	<input type="text"/> (std)	<input type="text"/> (g/L)	<input type="text"/> (µS/cm)	<input type="text"/> (mV)	<input type="text"/> (gal)
<input type="text"/> (°C)	<input type="text"/> (std)	<input type="text"/> (g/L)	<input type="text"/> (µS/cm)	<input type="text"/> (mV)	<input type="text"/> (gal)
<input type="text"/> (°C)	<input type="text"/> (std)	<input type="text"/> (g/L)	<input type="text"/> (µS/cm)	<input type="text"/> (mV)	<input type="text"/> (gal)

FIELD COMMENTS

SAMPLE APPEARANCE: clear ODOR: none COLOR: light brown to clear SHEEN: Y N
 WEATHER CONDITIONS: TEMPERATURE 70° WIND: Y N PRECIPITATION: Y N (IF Y TYPE) _____
 SPECIFIC COMMENTS: _____

1.530 x 3 = 4.589
Duplicate @ 1440

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

DATE: 9/24/12 PRINT: Christine Matthews SIGNATURE: [Signature]

DO NOT WRITE IN THESE SPACES
629

WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME: SJ 27-5 34A JOB# 074934
 SAMPLE ID: QW-074934-092412-CM-MW-3 WELL# MW-3

PURGE DATE (MM DD YY) 9.24.12 SAMPLE DATE (MM DD YY) 9.24.12 SAMPLE TIME (24 HOUR) 1400 WATER VOL. IN CASING (GALLONS) 1.3136 ACTUAL VOL. PURGED (GALLONS) 4.0

PURGING AND SAMPLING EQUIPMENT

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

PURGING DEVICE	<input checked="" type="radio"/> G	A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER	X= _____
		B - PERISTALTIC PUMP	E - PURGE PUMP	H - WATERRA®	PURGING DEVICE OTHER (SPECIFY) _____
SAMPLING DEVICE	<input checked="" type="radio"/> G	C - BLADDER PUMP	F - DIPPER BOTTLE	X - OTHER	X= _____
					SAMPLING DEVICE OTHER (SPECIFY) _____
PURGING MATERIAL	<input checked="" type="radio"/> E	A - TEFLON	D - PVC		X= _____
		B - STAINLESS STEEL	E - POLYETHYLENE		PURGING MATERIAL OTHER (SPECIFY) _____
SAMPLING MATERIAL	<input checked="" type="radio"/> E	C - POLYPROPYLENE	X - OTHER		X= _____
					SAMPLING MATERIAL OTHER (SPECIFY) _____
PURGE TUBING	<input checked="" type="radio"/> C	A - TEFLON	D - POLYPROPYLENE	G - COMBINATION	X= _____
		B - TYGON	E - POLYETHYLENE	TEFLON/POLYPROPYLENE	PURGE TUBING OTHER (SPECIFY) _____
SAMPLING TUBING	<input checked="" type="radio"/> C	C - ROPE	F - SILICONE	X - OTHER	X= _____
					SAMPLING TUBING OTHER (SPECIFY) _____
FILTERING DEVICES 0.45	<input checked="" type="radio"/> A	A - IN-LINE DISPOSABLE	B - PRESSURE	C - VACUUM	<u>.45 for metals only</u>

FIELD MEASUREMENTS

DEPTH TO WATER	<u>24.89</u>	(feet)	WELL ELEVATION	<u>97.24</u>	(feet)
WELL DEPTH	<u>33.10</u>	(feet)	GROUNDWATER ELEVATION	<u>72.35</u>	(feet)
TEMPERATURE	pH	TDS	CONDUCTIVITY	ORP	VOLUME
<u>12.75</u> (°C)	<u>6.41</u> (std)	<u>0.451</u> (g/L)	<u>531</u> (µS/cm)	<u>108.4</u> (mV)	<u>3.5</u> (gal)
<u>12.61</u> (°C)	<u>6.39</u> (std)	<u>0.452</u> (g/L)	<u>531</u> (µS/cm)	<u>101.2</u> (mV)	<u>3.75</u> (gal)
<u>12.55</u> (°C)	<u>6.39</u> (std)	<u>0.454</u> (g/L)	<u>533</u> (µS/cm)	<u>95.7</u> (mV)	<u>4.0</u> (gal)

DDE
17.01
7.35
6.25

SAMPLE APPEARANCE: clear ODOR: none COLOR: light brown to clear SHEEN N
 WEATHER CONDITIONS: TEMPERATURE 70° WINDY N PRECIPITATION N (IF Y, TYPE) _____
 SPECIFIC COMMENTS: _____

1.3136 x 3 = 3.94

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS
 DATE 9/24/12 PRINT Christine Matthews SIGNATURE [Signature]

WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME: SJ 27-5 34A JOB# 074934
 SAMPLE ID: GW-074934-092412-CM-MW-4 WELL# MW-4

WELL PURGING INFORMATION

9.24.12 9.24.12 1425 1.432 1425 2.5 gal
 PURGE DATE (MM DD YY) SAMPLE DATE (MM DD YY) SAMPLE TIME (24 HOUR) WATER VOL. IN CASING (GALLONS) ACTUAL VOL. PURGED (GALLONS)

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

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

FILTERING DEVICES 0.45 A A - IN-LINE DISPOSABLE B - PRESSURE C - VACUUM 45 for metals only

FIELD MEASUREMENTS

DEPTH TO WATER:	<u>24.62</u>	(feet)	WELL ELEVATION	<u>97.23</u>	(feet)
WELL DEPTH	<u>33.57</u>	(feet)	GROUNDWATER ELEVATION:	<u>72.61</u>	(feet)

TEMPERATURE	pH	TDS	CONDUCTIVITY	ORP	VOLUME
<u>12.73</u> (°C)	<u>7.03</u> (std)	<u>644</u> (g/L)	<u>159</u> (µS/cm)	<u>102.9</u> (mV)	<u>2.5</u> (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)
_____ (°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: clear ODOR: none COLOR: clear SHEEN Y N
 WEATHER CONDITIONS: TEMPERATURE 70° WIND Y N PRECIPITATION Y N (IF Y TYPE) _____
 SPECIFIC COMMENTS: _____

well bailed dry @ 1.5 gallons, allowed to recharge. Bailed
1.432 x 3 = 4.30 dry 2nd time @ 2.25 gallons total. Will
collect one set of parameters and sample.

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS
9/24/12 Christine Matthews [Signature]
 DATE PRINT SIGNATURE

40%
73.5%

APPENDIX B

SEPTEMBER 2012 ANNUAL GROUNDWATER LABORATORY ANALYTICAL REPORT

October 08, 2012

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

RE: Project: SAN JUAN 27-5 NO 34A 074934
Pace Project No.: 60129928

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 27, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Alice Flanagan

alice.flanagan@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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Page 1 of 13



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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 12-019-0
Illinois Certification #: 002885
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-12-3
Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

Page 2 of 13

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SAMPLE SUMMARY

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60129928001	GW-074934-082412-CM-MW-1	Water	09/24/12 13:45	09/27/12 08:20
60129928002	GW-074934-082412-CM-MW-2	Water	09/24/12 14:35	09/27/12 08:20
60129928003	GW-074934-082412-CM-MW-3	Water	09/24/12 14:00	09/27/12 08:20
60129928004	GW-074934-082412-CM-MW-4	Water	09/24/12 14:25	09/27/12 08:20
60129928005	GW-074934-082412-CM-MW-DUP	Water	09/24/12 14:40	09/27/12 08:20

REPORT OF LABORATORY ANALYSIS

SAMPLE ANALYTE COUNT

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60129928001	GW-074934-082412-CM-MW-1	EPA 6010	JGP	1
60129928002	GW-074934-082412-CM-MW-2	EPA 6010	JGP	1
60129928003	GW-074934-082412-CM-MW-3	EPA 6010	JGP	1
60129928004	GW-074934-082412-CM-MW-4	EPA 6010	JGP	1
60129928005	GW-074934-082412-CM-MW-DUP	EPA 6010	JGP	1

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Method: EPA 6010
Description: 6010 MET ICP, Dissolved
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: October 08, 2012

General Information:

5 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.

QC Batch: MPRP/19736

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60129930002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1071191)
 - Manganese, Dissolved
- MSD (Lab ID: 1071192)
 - Manganese, Dissolved

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.: 60129928

Sample: **GW-074934-082412-CM-MW-1** Lab ID: **60129928001** Collected: 09/24/12 13:45 Received: 09/27/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	0.76	mg/L	0.0050	0.00060	1	10/02/12 10:45	10/05/12 12:45	7439-96-5	



ANALYTICAL RESULTS

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Sample: **GW-074934-082412-CM-MW-2** Lab ID: **60129928002** Collected: 09/24/12 14:35 Received: 09/27/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	0.12	mg/L	0.0050	0.00060	1	10/02/12 10:45	10/05/12 12:47	7439-96-5	



ANALYTICAL RESULTS

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Sample: **GW-074934-082412-CM-MW-3** Lab ID: **60129928003** Collected: 09/24/12 14:00 Received: 09/27/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	1.2	mg/L	0.0050	0.00060	1	10/02/12 10:45	10/05/12 12:49	7439-96-5	



ANALYTICAL RESULTS

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Sample: **GW-074934-082412-CM-MW-4** Lab ID: **60129928004** Collected: 09/24/12 14:25 Received: 09/27/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	0.026	mg/L	0.0050	0.00060	1	10/02/12 10:45	10/05/12 12:51	7439-96-5	



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(913)599-5665

ANALYTICAL RESULTS

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Sample: **GW-074934-082412-CM-MW-DUP** Lab ID: **60129928005** Collected: 09/24/12 14:40 Received: 09/27/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	0.13	mg/L	0.0050	0.00060	1	10/02/12 10:45	10/05/12 12:54	7439-96-5	

QUALITY CONTROL DATA

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

QC Batch: MPRP/19736 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60129928001, 60129928002, 60129928003, 60129928004, 60129928005

METHOD BLANK: 1071189 Matrix: Water
Associated Lab Samples: 60129928001, 60129928002, 60129928003, 60129928004, 60129928005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Manganese, Dissolved	mg/L	ND	0.0050	10/05/12 12:14	

LABORATORY CONTROL SAMPLE: 1071190

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	mg/L	1	0.98	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1071191 1071192

Parameter	60129930002		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	RPD	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits				
Manganese, Dissolved	mg/L	2190 ug/L	1	1	5.1	5.1	287	290	75-125	1	20	M1	

QUALIFIERS

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

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.

PRL - Pace Reporting Limit.

RL - Reporting 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.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 27-5 NO 34A
Pace Project No.: 60129928

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60129928001	GW-074934-082412-CM-MW-1	EPA 3010	MPRP/19736	EPA 6010	ICP/16257
60129928002	GW-074934-082412-CM-MW-2	EPA 3010	MPRP/19736	EPA 6010	ICP/16257
60129928003	GW-074934-082412-CM-MW-3	EPA 3010	MPRP/19736	EPA 6010	ICP/16257
60129928004	GW-074934-082412-CM-MW-4	EPA 3010	MPRP/19736	EPA 6010	ICP/16257
60129928005	GW-074934-082412-CM-MW-DUP	EPA 3010	MPRP/19736	EPA 6010	ICP/16257



Sample Condition Upon Receipt – ESI Tech Specs

Client Name: COP - CRA

Project #: 60129928

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Optional
Proj Due Date: <u>10/11</u>
Proj Name: _____

Tracking #: 7990 5200 0642 Pace Shipping Label Used? Yes No

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

Packing Material: Bubble Wrap Bubble Bags Foam None Other EPIC

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

Cooler Temperature: 1.4

Date and initials of person examining contents: <u>PC 9/17/12</u>

Temperature should be above freezing to 8°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): <u>PC 9/17/12</u>	<input checked="" type="checkbox"/> Yes <input 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 checked="" 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: <u>NC</u>

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>1647</u>	Start: _____
End: <u>1652</u>	End: _____
Temp: _____	Temp: _____

Project Manager Review: [Signature] Date: 9/17/12

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).