

3R - 432

Dec 2010

GWMR

04/28/2011

3R432

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



TETRATECH, INC.

April 28, 2011

Mr. Steve Austin
Navajo Nation Environmental Protection Agency
PO Box 1999
Shiprock, New Mexico 87420

RE: ConocoPhillips Company Charles et al. No. I – December 2010 Groundwater Monitoring Report, San Juan County, New Mexico

Dear Mr. Austin:

Enclosed please find one copy of the above-referenced document as compiled by Tetra Tech, Inc., for this San Juan 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

Kelly E. Blanchard
Project Manager/Geologist

RECEIVED OCD
2011 MAY - 2 A 11:54

Cc: Glenn von Gonten, NMOCD
Brandon Powell, NMOCD
Terry Lauck, ConocoPhillips (electronic only)

Enclosures (1)

**DECEMBER 2010 QUARTERLY GROUNDWATER
MONITORING REPORT**

CONOCOPHILLIPS COMPANY

**CHARLES ET AL. NO. I
NATURAL GAS PRODUCTION SITE
SAN JUAN COUNTY, NEW MEXICO**

API # 30-045-06623

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. 114-690155

April 2011

TABLE OF CONTENTS

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

FIGURES

1. Site Location Map
2. Site Detail Map
3. Groundwater Elevation Contour Map – December 2010
4. Benzene Concentration Contour Map – December 2010
5. Benzene Concentration vs. Groundwater Elevation over Time in MW-1

TABLES

1. Site History Timeline
2. Groundwater Elevation Data Summary (June 2008 through December 2010)
3. Groundwater Laboratory Analytical Results Summary (June 2008 through December 2010)

APPENDICES

Appendix A - December 2010 Quarterly Groundwater Sampling Field Forms

Appendix B - December 2010 Quarterly Groundwater Laboratory Analytical Report

SEPTEMBER 2010 QUARTERLY GROUNDWATER MONITORING REPORT

CHARLES ET AL. NO. 1, SAN JUAN COUNTY, NEW MEXICO

1.0 INTRODUCTION

This report discusses the groundwater sampling event performed by Tetra Tech, Inc. (Tetra Tech) on December 16, 2010 at the ConocoPhillips Company Charles et al. No. 1 remediation site located near the Angel Peak area of northwestern New Mexico (Site). The Site is situated on Navajo Nation land in Section 12, Township 27N, Range 9W, of San Juan County, New Mexico. A site location map and detail map are included as **Figures 1** and **2**, respectively.

1.1 Site Background

The historical timeline for the Site is summarized below, and is also presented in **Table I**.

The Charles et al. No. 1 natural gas production well was spudded in April 1965 by the Austral Oil Company of Houston, TX. Operatorship of the well was transferred several times before a subsidiary of Burlington Resources became the operator in August 1992. The well was abandoned shortly thereafter due to low production. The well was recompleted and production was restored on May 20, 2003. ConocoPhillips acquired Burlington Resources on March 30, 2006.

A ConocoPhillips employee discovered an area of dead vegetation approximately 100 feet from the Blanco Wash while investigating a pipeline release on June 23, 2008 (**Figure 2**). ConocoPhillips reported the release to the NMOCD by phone and E-mail on June 24, 2008 and followed-up with submittal of a Form C-141 to NMOCD on June 30, 2008. Envirotech, Inc. (Envirotech) advanced several soil borings and installed seven piezometer/monitor wells using a hand auger between the dates of June 25 and 26, 2008. Solar-powered soil vapor extraction (SVE) equipment was installed over Monitor Well MW-1 on August 14, 2008 to facilitate the remediation of the area (Envirotech, 2009).

Envirotech conducted quarterly groundwater sampling events beginning June 25, 2008; and recommended discontinuing sampling Monitor Wells MW-5, MW-6, and MW-7 in March 2009. Tetra Tech began monitoring the Charles et al. No. 1 remediation site in March, 2010. This report represents the fourth round of groundwater monitoring conducted by Tetra Tech at the Site.

2.0 GROUNDWATER MONITORING SUMMARY, SAMPLING METHODOLOGY, AND RESULTS

2.1 Groundwater Monitoring Summary

A groundwater sampling event was conducted at the Site on December 16, 2010. Prior to collection of groundwater samples from Monitor Wells MW-1, MW-2, MW-3 and MW-4, depth to groundwater was measured in all Site monitor wells using a dual interface probe (**Table 2**). A groundwater elevation map reflecting December 16, 2010 groundwater elevations is presented as **Figure 3**. A historical groundwater elevation summary is included in **Table 2**.

2.2 Groundwater Sampling Methodology

During the December 16, 2010 groundwater monitoring event, Monitor Wells MW-1, MW-2, MW-3, and MW-4 were purged of at least 3 casing volumes of groundwater using a 1.5-inch diameter, polyethylene dedicated bailer. Groundwater parameters were not collected while bailing purge water due to the low volume of water in each well. Sample times and field observations of groundwater were recorded on Tetra Tech Water Sampling Field Forms (**Appendix A**). Groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped under chain-of-custody documentation to Southern Petroleum Laboratory (SPL) of Houston, Texas. December 2010 groundwater samples were analyzed for BTEX by EPA Method 8260B (**Table 3**). The Laboratory analytical report is included as **Appendix B**.

2.3 Groundwater Sampling Analytical Results

The Navajo Nation Environmental Protection Agency (NNEPA) has not established groundwater quality standards; however drinking water quality on Navajo Nation land is mandated in Part II the Navajo Nation Primary Drinking Water Regulations (NNPDWR). Drinking water quality standards have been set for the protection of human health, domestic water supply, and irrigation use. Exceedences of NNPDWR water quality standards in Site monitoring wells are discussed below.

• Benzene

- The NNPDWR drinking water quality standard for benzene is 5 µg/L. The laboratory analysis of groundwater samples collected from Monitor Well MW-1 revealed a concentration of 180 µg/L.

The corresponding laboratory analytical report for the December 2010 groundwater sampling event is included as **Appendix B**. A historical laboratory analytical summary is available as **Table 3**. A Site map showing the concentration of benzene present in groundwater is included as **Figure 4**. A hydrograph showing benzene concentration vs. groundwater level over time in MW-1 is included as **Figure 5**.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater samples collected from MW-1 have continually exceeded NNPDWR groundwater quality standards for benzene from June 2008 to December 2010. Monitoring Well MW-1 was also found to exceed NNPDWR groundwater quality standards for toluene in September of 2010. Tetra Tech placed an oil absorbent sock in MW-1 during the September 2010 monitoring event. The sock could be contributing to a significant decrease of benzene between the September 2010 and December 2010 monitoring events. Based on the historical groundwater quality data, groundwater samples collected from MW-3 and MW-4

have never exceeded NNPDWR groundwater quality standards for BTEX constituents during sampling conducted from June 2008 to December 2010.

Tetra Tech recommends continued quarterly groundwater sampling at the Site. Site closure will be requested when groundwater analytical results indicate that all constituents of concern are consistently below NNPDWR drinking water quality standards. Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetrtech.com if you have any questions or require additional information.

4.0 REFERENCES

Envirotech Incorporated (2009). *June 2009 Groundwater Monitoring Report*. Prepared for ConocoPhillips. Report Dated August 2009.

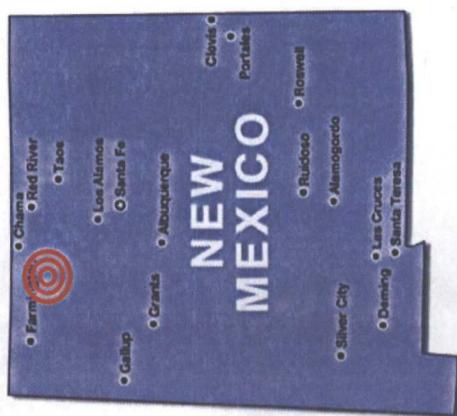
State of New Mexico Energy Minerals and Natural Resources Form C-141 (2003). *Release Notification and Corrective Action*. Dated June 30, 2008.

FIGURES

1. Site Location Map
2. Site Detail Map
3. Groundwater Elevation Contour Map – December 2010
4. Benzene Concentration Contour Map – December 2010
5. Benzene Concentration vs. Groundwater Elevation over Time in MW-I

FIGURE 1.

Site Location Map
ConocoPhillips
Company
Charles et al. No. 1
San Juan County, NM



ConocoPhillips Company
Charles et al. No. 1
Remediation Site Location

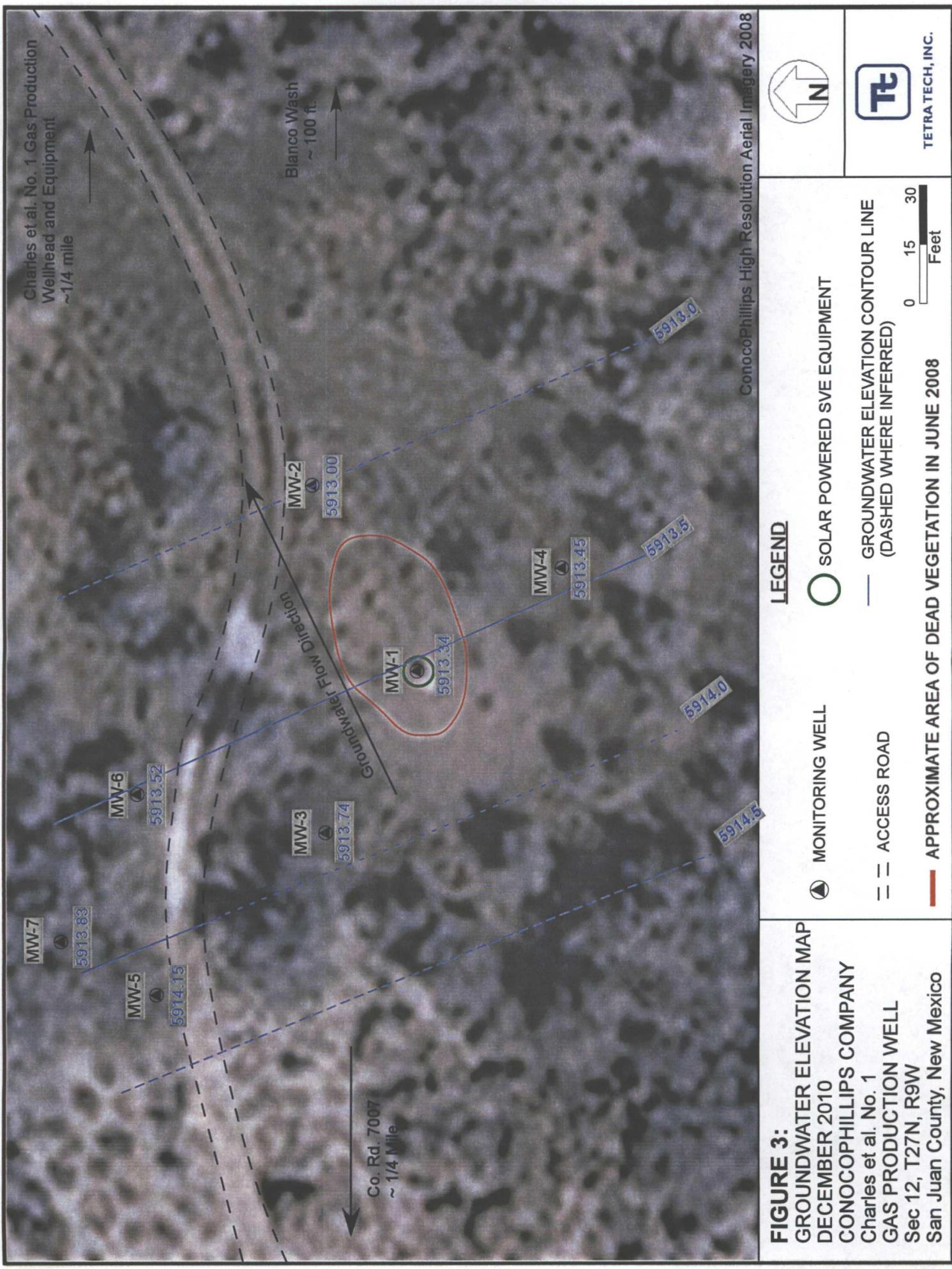
Latitude: 36.58643° N
Longitude: -107.73593° W



TETRA TECH, INC.







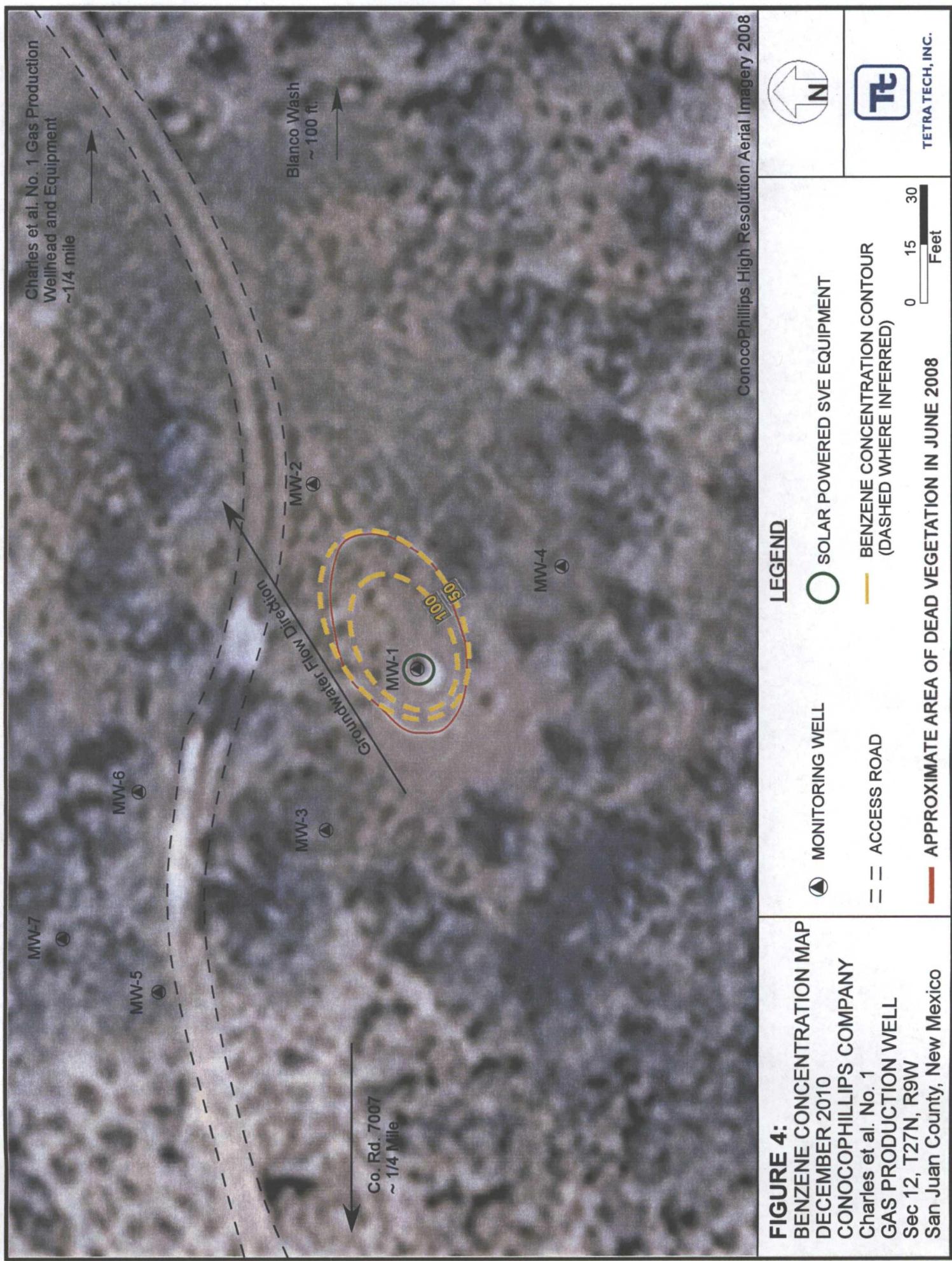


FIGURE 4:
BENZENE CONCENTRATION MAP
DECEMBER 2010
CONOCOPHILLIPS COMPANY
Charles et al. No. 1
GAS PRODUCTION WELL
Sec 12, T27N, R9W
San Juan County, New Mexico

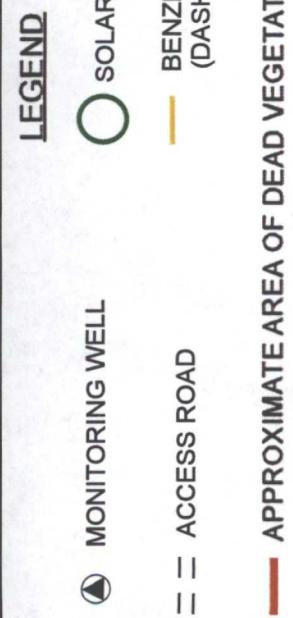
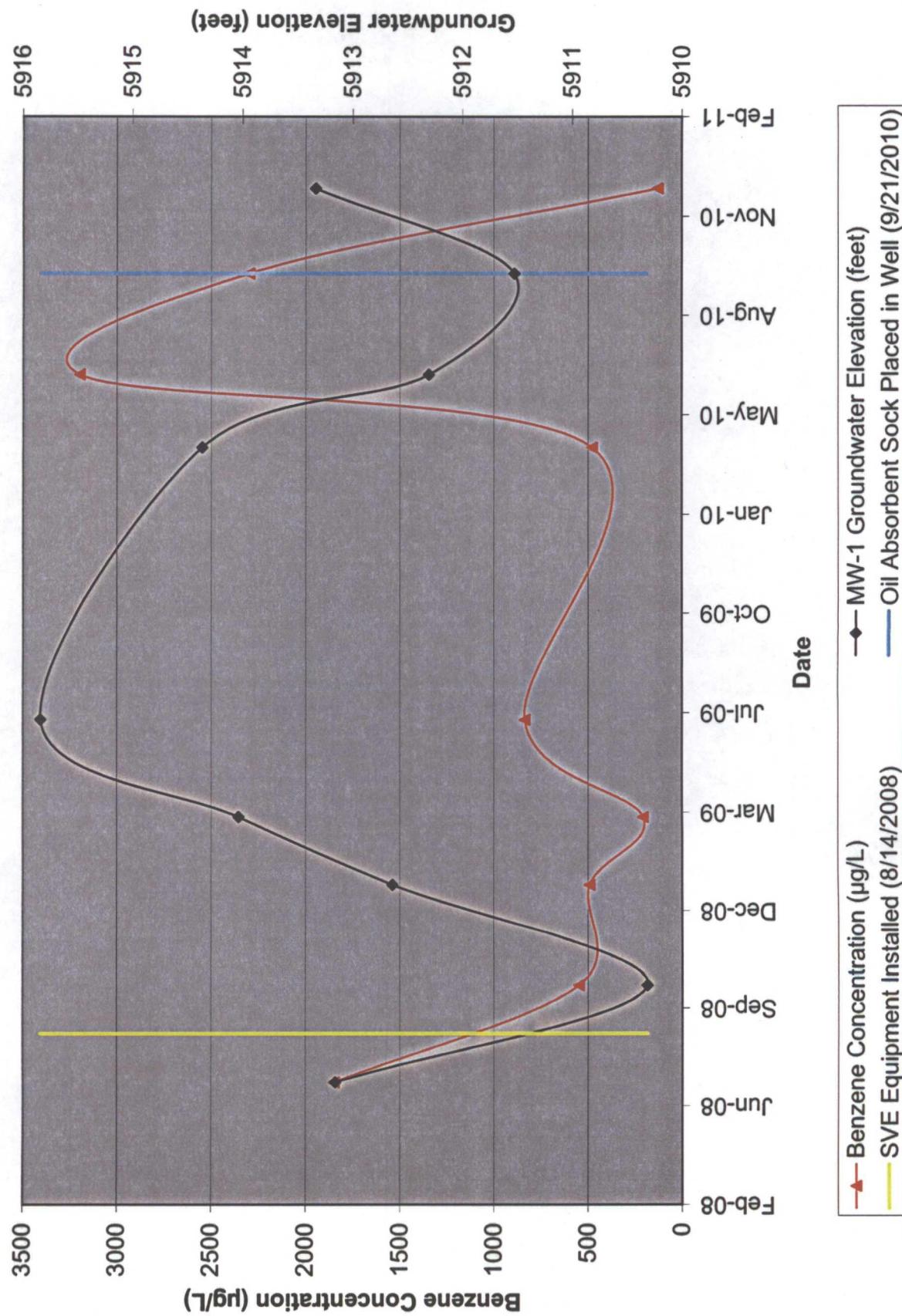


Figure 5. ConocoPhillips Charles et al. No. 1 Benzene Concentration vs. Groundwater Elevation Over Time in MW-1



TABLES

1. Site History Timeline
2. Groundwater Elevation Data Summary (June 2008 through December 2010)
3. Groundwater Laboratory Analytical Results Summary (June 2008 through December 2010)

Table 1. ConocoPhillips Company, Charles et al. No. 1 - Site History Timeline

DATE	ACTIVITY
April 12, 1965	Well spudded by Austral Oil Company Inc.
March 30, 1978	Change in operatorship to the Superior Oil Company.
September 1, 1986	Change in operatorship to Mobil Producing TX and NM Inc.
August 1, 1992	Change in operatorship to Meridian Oil Inc, a subsidiary of Burlington Resources.
August 1, 2001	Burlington Resources abandons well due to low production.
May 20, 2003	The Charles et al. No. 1 natural gas Well returned to production.
March 31, 2006	ConocoPhillips acquired Burlington Resources.
June 23, 2008	A release was discovered from the pipe running from the wellhead to the meter house; upon walking the pipeline, an area of dead vegetation was also discovered approximately 100 feet from Blanco Wash.
June 24, 2008	ConocoPhillips reported the release to the New Mexico Oil Conservation Division (NMOCD) via phone and email.
June 25-26, 2008	Envirotech, Inc. of Farmington, NM advances several soil borings and installed piezometers using a hand auger to determine the extent of impact (Envirotech, 2009). Envirotech also installed Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7; and obtained water level measurements and samples from all of the wells.
August 14, 2008	Envirotech, Inc. installed solar-powered Soil Vapor Extraction (SVE) equipment over the existing Monitor Well, MW-1; and obtained water level measurements and samples from all of the wells.
October 2, 2008	Envirotech, Inc. completed the third round of groundwater sampling.
January 13, 2009	Envirotech, Inc. completed the fourth round of groundwater sampling.
March 23, 2009	Envirotech, Inc. completed the fifth round of groundwater sampling and recommended sampling only Monitor Wells MW-1, MW-2, MW-3, and MW-4.
June 29, 2009	Envirotech, Inc. completed the sixth round of groundwater sampling and recommended drilling additional monitoring wells down-gradient of MW-2.
March 30, 2010	Tetra Tech, Inc. completed the seventh round of groundwater sampling.
June 11, 2010	Tetra Tech, Inc. completed the eighth round of groundwater sampling.
September 21, 2010	Tetra Tech, Inc. completed the ninth round of groundwater sampling.
December 16, 2010	Tetra Tech, Inc. completed the tenth round of groundwater sampling. Benzene levels in MW-1 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard.

Table 2. ConocoPhillips Company, Charles et al. No. 1 - Groundwater Elevation Summary

Monitor Well	TOC Elevation* (ft AMSL)	Sample Date	Depth to Water (ft)	GW Elevation (ft AMSL)
MW-1	5917.87	6/25/2008	4.71	5913.16
		8/14/2008	5.21	5912.66
	5917.05	10/2/2008	5.13	5911.92
		1/13/2009	4.41	5912.64
		3/23/2009	3.01	5914.04
		6/29/2009	2.12	5914.93
		3/30/2010	2.68	5914.37
		6/11/2010	4.74	5912.31
		9/21/2010	5.52	5911.53
		12/16/2010	3.71	5913.34
MW-2	5917.33	6/25/2008	4.66	5912.67
		8/14/2008	5.35	5911.98
	5916.53	10/2/2008	5.12	5911.41
		1/13/2009	3.15	5913.38
		3/23/2009	2.65	5913.88
		6/29/2009	4.20	5912.33
		3/30/2010	2.57	5913.96
		6/11/2010	4.63	5911.90
		9/21/2010	5.53	5911.00
		12/16/2010	3.53	5913.00
MW-3	5920.57	6/25/2008	7.16	5913.41
		8/14/2008	8.86	5911.71
	5919.8	10/2/2008	7.63	5912.17
		1/13/2009	5.56	5914.24
		3/23/2009	5.56	5914.24
		6/29/2009	1.10	5918.70
		3/30/2010	5.38	5914.42
		6/11/2010	7.44	5912.36
		9/21/2010	8.22	5911.58
		12/16/2010	6.06	5913.74
MW-4	5920.48	6/25/2008	4.27	5916.21
		8/14/2008	7.89	5912.59
	5919.69	10/2/2008	7.73	5911.96
		1/13/2009	5.94	5913.75
		3/23/2009	5.64	5914.05
		6/29/2009	6.84	5912.85
		3/30/2010	5.40	5914.29
		6/11/2010	7.23	5912.46
		9/21/2010	8.17	5911.52
		12/16/2010	6.24	5913.45
MW-5	5923.63	6/26/2008	8.23	5915.4
		8/14/2008	8.68	5914.95
	5921.55	10/2/2008	8.70	5912.85
		1/13/2009	6.96	5914.59
		3/23/2009	6.58	5914.97
		6/29/2009	4.10	5917.45
		3/30/2010	NM	NA
		6/11/2010	8.20	5913.35
		9/21/2010	9.25	5912.30
		12/16/2010	7.40	5914.15

Table 2. ConocoPhillips Company, Charles et al. No. 1 - Groundwater Elevation Summary

Monitor Well	TOC Elevation* (ft AMSL)	Sample Date	Depth to Water (ft)	GW Elevation (ft AMSL)
MW-6	5920.68	6/26/2008	6.75	5913.93
		8/14/2008	6.97	5913.71
	5918.64	10/2/2008	6.83	5911.81
		1/13/2009	4.89	5913.75
		3/23/2009	4.12	5914.52
		6/29/2009	1.80	5916.84
		3/30/2010	NM	NA
		6/11/2010	6.63	5912.01
		9/21/2010	7.41	5911.23
		12/16/2010	5.12	5913.52
MW-7	5920.75	6/26/2008	6.32	5914.43
		8/14/2008	7.17	5913.58
	5918.74	10/2/2008	6.42	5912.32
		1/13/2009	NM	NA
		3/23/2009	4.67	5914.07
		6/29/2009	1.56	5917.18
		3/30/2010	NM	NA
		6/11/2010	NM	NA
		9/21/2010	NM	NA
		12/16/2010	4.91	5913.83

Explanation

ft = feet

AMSL = Above mean sea level

DTW = Depth to water

NA = Not available

NM = Not measured

* Elevation Measurements obtained from 2009 Envirotech investigation

Note: Measurements between 6/25/2008 and 6/29/2009 obtained by Envirotech, Inc.

Table 3. ConocoPhillips Company, Charles et al. No. 1 - Groundwater Analytical Results Summary

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW-1	6/25/2008	1850	486	971	379
	9/25/2008	575	660	293	1547
	1/13/2009	494	581	474	3572
	3/23/2009	210	311	378	1418
	6/29/2009	839	107	674	3404
	3/30/2010	480	110	250	1573
	6/11/2010	3,200	450	690	4,510
	9/21/2010	2,300	1100	250	4,840
	12/16/2010	180	200	250	1,790
MW-2	6/25/2008	4.2	4.6	1.6	1.1
	9/25/2008	19.5	25.8	5.1	100.8
	1/13/2009	2.1	2	2.2	28.1
	3/23/2009	1.4	0.4	0.6	7.3
	6/29/2009	1.5	ND	0.2	0.4
	3/30/2010	< 1.0	< 1.0	< 1.0	< 1.0
	6/11/2010	< 1.0	< 1.0	< 1.0	< 1.0
	9/21/2010	< 1.0	< 1.0	< 1.0	< 1.0
	12/16/2010	< 1.0	< 1.0	< 1.0	< 1.0
MW-3	6/25/2008	ND	ND	ND	ND
	9/25/2008	ND	2.3	0.9	12.1
	1/13/2009	ND	ND	ND	ND
	3/23/2009	ND	0.2	0.2	1.4
	6/29/2009	ND	1.7	0.7	8.2
	3/30/2010	< 1.0	< 1.0	< 1.0	< 1.0
	6/11/2010	< 1.0	< 1.0	< 1.0	< 1.0
	9/21/2010	< 1.0	< 1.0	< 1.0	< 1.0
	12/16/2010	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	6/25/2008	3.8	19.9	1.4	7
	9/25/2008	ND	ND	ND	ND
	1/13/2009	ND	ND	ND	ND
	3/23/2009	ND	ND	ND	ND
	6/29/2009	ND	ND	0.2	2.9
	3/30/2010	< 1.0	< 1.0	< 1.0	< 1.0
	6/11/2010	< 1.0	< 1.0	< 1.0	< 1.0
	9/21/2010	< 1.0	< 1.0	< 1.0	< 1.0
	12/16/2010	< 1.0	< 1.0	< 1.0	< 1.0

Table 3. ConocoPhillips Company, Charles et al. No. 1 - Groundwater Analytical Results Summary

Well ID	Date	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)
MW-5	6/26/2008	ND	ND	ND	ND
	9/25/2008	ND	ND	ND	ND
	1/13/2009	ND	ND	ND	ND
	3/23/2009	ND	ND	ND	ND
	6/29/2009	NS	NS	NS	NS
	3/30/2010	NS	NS	NS	NS
	6/11/2010	NS	NS	NS	NS
	9/21/2010	NS	NS	NS	NS
	12/16/2010	NS	NS	NS	NS
MW-6	6/26/2008	ND	ND	ND	ND
	9/25/2008	ND	ND	ND	ND
	1/13/2009	ND	ND	ND	ND
	3/23/2009	ND	ND	ND	ND
	6/29/2009	NS	NS	NS	NS
	3/30/2010	NS	NS	NS	NS
	6/11/2010	NS	NS	NS	NS
	9/21/2010	NS	NS	NS	NS
	12/16/2010	NS	NS	NS	NS
MW-7	6/26/2008	ND	ND	ND	ND
	9/25/2008	ND	ND	ND	ND
	1/13/2009	NS	NS	NS	NS
	3/23/2009	ND	ND	ND	ND
	6/29/2009	NS	NS	NS	NS
	3/30/2010	NS	NS	NS	NS
	6/11/2010	NS	NS	NS	NS
	9/21/2010	NS	NS	NS	NS
	12/16/2010	NS	NS	NS	NS
NNEPA Standards		5 ($\mu\text{g/L}$)	1000 ($\mu\text{g/L}$)	700 ($\mu\text{g/L}$)	10,000 ($\mu\text{g/L}$)

Explanation

ND = Not Detected

NS = Not Sampled

NNEPA = Navajo Nation Environmental Protection Agency

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

$\mu\text{g/L}$ = micrograms per liter (parts per billion)

< 1.0 = Below laboratory detection limit of 1.0 $\mu\text{g/L}$

Bold = concentrations that exceed the NNEPA limits

Note: Analytes sampled between 6/25/2008 and 6/29/2009 obtained by Envirotech, Inc.

APPENDIX A

December 2010 Quarterly Groundwater Sampling Field Forms



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name Charles Et Al #1

Page 1 of 4

Plot No.

114-1690165

Site Location

Angel Peak area

Site/Well No.

MW-1

Coded/

Replicate No.

1620

Date

12-16-15

Weather

Sunny
Cold
30°Time Sampling
BeganTime Sampling
Completed

1623

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface

MP Elevation

6917.05

Total Sounded Depth of Well Below MP

Water-Level Elevation

5913.34

Held Depth to Water Below MP

Diameter of Casing

2"

Wet Water Column in Well

Gallons Pumped/Bailed
Prior to Sampling

pumped/bailed

Gallons per Foot 0.16

~1.25

Gallons in Well 0.80x3 = 2.4

Sampling Pump Intake Setting
(feet below land surface)

Purging Equipment

Purge pump / Bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity ($\mu\text{S}/\text{cm}^3$)	TDS (g/L)	DO (mg/L)	DO %	ORP (mV)	Volume (gal.)
<i>No Parameters due to small well volume & low reading</i>								

Sampling Equipment

Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTEX

3 40mL VOA's

HCl

Remarks

Water is black & oxygen deficient

Sampling Personnel

Cassie Brown, Christine Mathews

Well Casing Volumes

Gal./ft. 1 1/4" = 0.077
1 1/2" = 0.102" = 0.16
2 1/2" = 0.243" = 0.37
3 1/2" = 0.504" = 0.65
6" = 1.46



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name Charles Et Al #1

Page 3 of 4Loc No. 114090155Site Location Angel Peak areaSite/Well No. MW-3Coded/
Replicate No. —Weather PartlyTime Sampling
Began —Date 12-16-10Time Sampling
Completed 155830°

EVACUATION DATA

Description of Measuring Point (MP) Top of CasingHeight of MP Above/Below Land Surface —MP Elevation 5919.8Total Sounded Depth of Well Below MP 10.30Water-Level Elevation 5913.74Held — Depth to Water Below MP 4.06Diameter of Casing 2"Wet — Water Column in Well 4.29Gallons Pumped/Bailed pumped/bailedGallons per Foot 0.16Sampling Pump Intake Setting
(feet below land surface) 2.010.30
4.29
2.0Gallons in Well 1.61Purging Equipment Purge pump / Bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity ($\mu\text{S}/\text{cm}^3$)	TDS (g/L)	DO (mg/L)	DO %	ORP (mV)	Volume (gal.)
<i>No</i>	<i>Parameters due to low well volume</i>							

Sampling Equipment Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTEX 3 40mL VOA's HClRemarks H2O is black/grey recharge; no organ.Sampling Personnel Cassie Brown, Christine Mathews

Well Casing Volumes

Gal./ft.	$1 \frac{1}{4}'' = 0.077$	$2'' = 0.16$	$3'' = 0.37$	$4'' = 0.65$
	$1 \frac{1}{2}'' = 0.10$	$2 \frac{1}{2}'' = 0.24$	$3 \frac{1}{2}'' = 0.50$	$6'' = 1.46$



TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name Charles Et Al #1

Page 4 of 4Jct No. 114100155Site Location Angel Peak area

Site/Well No. MW-4

Date 16/5Weather Overcast

Time Sampling Begun

Coded/
Replicate No. —

Time Sampling Completed

Cold 33°12/10/10

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface

MP Elevation 6919.69

Total Sounded Depth of Well Below MP

Water-Level Elevation 5913.45Held _____ Depth to Water Below MP 6.24Diameter of Casing 2"Wet _____ Water Column in Well 1.14Gallons Pumped/Bailed Prior to Sampling pumped/bailedGallons per Foot 0.16Sampling Pump Intake Setting (feet below land surface) —Gallons in Well 0.1064Purging Equipment Purge pump / Bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity ($\mu\text{S}/\text{cm}^3$)	TDS (g/L)	DO (mg/L)	DO %	ORP (mV)	Volume (gal.)

Sampling Equipment Purge Pump/Bailer

Constituents Sampled

Container Description

Preservative

BTEX	1	3 40mL VOA's	HCl

Remarks H2O is black and recharge. No stain / No Paraffins due to low well volume.Sampling Personnel Cassie Brown, Christine Mathews

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

APPENDIX B

December 2010 Quarterly Groundwater Laboratory Analytical Report



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

Certificate of Analysis

January 4, 2011

Workorder: H10120379

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

Project: COP - Charles Et Al No. 1
Project Number: COP - Charles Et Al No. 1
Site: COP - Charles Et Al No. 1, San Juan County, NM
PO Number: ENFOS
NELAC Cert. No.: T104704205-09-3

This Report Contains A Total Of 18 Pages

Excluding Any Attachments



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

Certificate of Analysis

January 4, 2011

Workorder: H10120379

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

Project: COP - Charles Et Al No. 1
Project Number: COP - Charles Et Al No. 1
Site: COP - Charles Et Al No. 1, San Juan County, NM
PO Number: ENFOS
NELAC Cert. No.: T104704205-09-3

I. SAMPLE RECEIPT:

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

II: ANALYSES AND EXCEPTIONS:

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

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

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

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

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

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

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



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

Certificate of Analysis

January 4, 2011

Workorder: H10120379

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

Project: COP - Charles Et Al No. 1
Project Number: COP - Charles Et Al No. 1
Site: COP - Charles Et Al No. 1, San Juan County, NM
PO Number: ENFOS
NELAC Cert. No.: T104704205-09-3

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.

A handwritten signature in black ink, appearing to read "Erica Cardenas".

Erica Cardenas, Senior Project Manager

Enclosures



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

SAMPLE SUMMARY

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

Lab ID	Sample ID	Matrix	COC ID	Date/Time Collected	Date/Time Received
H10120379001	MW-1	Water		12/16/2010 16:23	12/18/2010 10:50
H10120379002	MW-2	Water		12/16/2010 16:08	12/18/2010 10:50
H10120379003	MW-3	Water		12/16/2010 15:58	12/18/2010 10:50
H10120379004	MW-4	Water		12/16/2010 16:15	12/18/2010 10:50
H10120379005	DUPLICATE	Water		12/16/2010 16:30	12/18/2010 10:50
H10120379006	TRIP BLANK	Water		12/17/2010 07:15	12/18/2010 10:50



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

ANALYTICAL RESULTS

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

Lab ID: H10120379001

Date/Time Received: 12/18/2010 10:50 Matrix: Water

Sample ID: MW-1

Date/Time Collected: 12/16/2010 16:23

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 3101 SW-846 8260B on 12/28/2010 20:51 by LKL

Parameters	Results						Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	Reg Lmt	Prep	Analysis
Benzene	180		10	1.3	10			3101
Ethylbenzene	250		10	4.8	10			3101
Toluene	200		10	1.3	10			3101
m,p-Xylene	1600		10	5.8	10			3101
o-Xylene	190		10	3.5	10			3101
Xylenes, Total	1790		10	3.5	10			3101
4-Bromofluorobenzene (S)	98.1 %		74-125		10			3101
1,2-Dichloroethane-d4 (S)	92.5 %		70-130		10			3101
Toluene-d8 (S)	101 %		82-118		10			3101



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

ANALYTICAL RESULTS

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

Lab ID: **H10120379002**

Date/Time Received: 12/18/2010 10:50 Matrix: Water

Sample ID: **MW-2**

Date/Time Collected: 12/16/2010 16:08

VOLATILES

Parameters	Results						Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND		1.0	0.13	1			3097
Ethylbenzene	ND		1.0	0.48	1			3097
Toluene	ND		1.0	0.13	1			3097
m,p-Xylene	ND		1.0	0.58	1			3097
o-Xylene	ND		1.0	0.35	1			3097
Xylenes, Total	ND		1.0	0.35	1			3097
4-Bromofluorobenzene (S)	97.9 %		74-125		1			3097
1,2-Dichloroethane-d4 (S)	92.7 %		70-130		1			3097
Toluene-d8 (S)	103 %		82-118		1			3097



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

ANALYTICAL RESULTS

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

Lab ID: H10120379003

Date/Time Received: 12/18/2010 10:50 Matrix: Water

Sample ID: MW-3

Date/Time Collected: 12/16/2010 15:58

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches

Batch: 3097 SW-846 8260B on 12/27/2010 13:16 by LKL

Parameters	Results						Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND		1.0	0.13	1			3097
Ethylbenzene	ND		1.0	0.48	1			3097
Toluene	ND		1.0	0.13	1			3097
m,p-Xylene	ND		1.0	0.58	1			3097
o-Xylene	ND		1.0	0.35	1			3097
Xylenes, Total	ND		1.0	0.35	1			3097
4-Bromofluorobenzene (S)	99.9 %		74-125		1			3097
1,2-Dichloroethane-d4 (S)	91.3 %		70-130		1			3097
Toluene-d8 (S)	101 %		82-118		1			3097



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

ANALYTICAL RESULTS

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

Lab ID: **H10120379004**

Date/Time Received: 12/18/2010 10:50 Matrix: Water

Sample ID: **MW-4**

Date/Time Collected: 12/16/2010 16:15

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches

Batch: 3097 SW-846 8260B on 12/27/2010 20:32 by LKL

Parameters	Results						Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND		1.0	0.13	1			3097
Ethylbenzene	ND		1.0	0.48	1			3097
Toluene	ND		1.0	0.13	1			3097
m,p-Xylene	ND		1.0	0.58	1			3097
o-Xylene	ND		1.0	0.35	1			3097
Xylenes, Total	ND		1.0	0.35	1			3097
4-Bromofluorobenzene (S)	99.4 %		74-125		1			3097
1,2-Dichloroethane-d4 (S)	93.3 %		70-130		1			3097
Toluene-d8 (S)	101 %		82-118		1			3097



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

ANALYTICAL RESULTS

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

Lab ID: **H10120379005**

Date/Time Received: 12/18/2010 10:50 Matrix: Water

Sample ID: **DUPLICATE**

Date/Time Collected: 12/16/2010 16:30

VOLATILES

Analysis Desc: SW-846 8260B

SW-846 5030 Analytical Batches:

Batch: 3101 SW-846 8260B on 12/28/2010 19:05 by LK

Parameters	Results						Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	350		10	1.3	10			3101
Ethylbenzene	310		10	4.8	10			3101
Toluene	390		10	1.3	10			3101
m,p-Xylene	1900		10	5.8	10			3101
o-Xylene	240		10	3.5	10			3101
Xylenes, Total	2140		10	3.5	10			3101
4-Bromofluorobenzene (S)	100 %		74-125		10			3101
1,2-Dichloroethane-d4 (S)	93.2 %		70-130		10			3101
Toluene-d8 (S)	102 %		82-118		10			3101



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

ANALYTICAL RESULTS

Workorder: H10120379 : COP - Charles Et Al No: 1

Project Number: COP - Charles Et Al No. 1

Lab ID: **H10120379006**

Date/Time Received: 12/18/2010 10:50 Matrix: Water

Sample ID: **TRIP BLANK**

Date/Time Collected: 12/17/2010 07:15

VOLATILES

Parameters	Results						Batch Information	
	ug/l	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND		1.0	0.13	1			3097
Ethylbenzene	ND		1.0	0.48	1			3097
Toluene	ND		1.0	0.13	1			3097
m,p-Xylene	ND		1.0	0.58	1			3097
o-Xylene	ND		1.0	0.35	1			3097
Xylenes, Total	ND		1.0	0.35	1			3097
4-Bromofluorobenzene (S)	99.7 %		74-125		1			3097
1,2-Dichloroethane-d4 (S)	94.4 %		70-130		1			3097
Toluene-d8 (S)	101 %		82-118		1			3097



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

QUALITY CONTROL DATA

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

QC Batch:	MSV/3096	Analysis Method:	SW-846 8260B
QC Batch Method:	SW-846 5030	Preparation:	12/27/2010 00:00 by LKL
Associated Lab Samples:	H10120343001 H10120379004	H10120343002 H10120379006	H10120378001 H10120378002 H10120379002 H10120379003

METHOD BLANK: 87856

Analysis Date/Time Analyst: 12/27/2010 11:57 LKL

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)	%	100		74-125
1,2-Dichloroethane-d4 (S)	%	93		70-130
Toluene-d8 (S)	%	99.8		82-118

LABORATORY CONTROL SAMPLE: 87857

Analysis Date/Time Analyst: 12/27/2010 11:30 LKL

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits
Benzene	ug/l	20	20.3	102	74-123
Ethylbenzene	ug/l	20	21.3	106	72-127
Toluene	ug/l	20	20.6	103	74-126
m,p-Xylene	ug/l	40	42.7	107	71-129
o-Xylene	ug/l	20	21.0	105	74-130
Xylenes, Total	ug/l	60	63.73	106	71-130
4-Bromofluorobenzene (S)	%			98.0	74-125
1,2-Dichloroethane-d4 (S)	%			97.2	70-130
Toluene-d8 (S)	%			101	82-118

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 87858 87859 Original: H10120379003

MS Analysis Date/Time Analyst: 12/27/2010 13:45 LKL

MSD Analysis Date/Time Analyst: 12/27/2010 14:11 LKL

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Benzene	ug/l	ND	20	19.4	19.6	96.9	98.1	70-124	1.2	20
Ethylbenzene	ug/l	ND	20	21.0	19.9	105	99.7	35-175	5.1	20
Toluene	ug/l	ND	20	20.0	19.4	99.8	97.2	70-131	2.7	20

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



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

QUALITY CONTROL DATA

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 87858 87859 Original: H10120379003

MS Analysis Date/Time Analyst: 12/27/2010 13:45 LKL

MSD Analysis Date/Time Analyst: 12/27/2010 14:11 LKL

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
m,p-Xylene	ug/l	ND	40	40.2	38.4	100	95.9	35-175	4.7	20
o-Xylene	ug/l	ND	20	20.4	19.8	102	98.9	35-175	3.0	20
Xylenes, Total	ug/l	ND	60	60.57	58.13	101	96.9	35-175	4.1	20
4-Bromofluorobenzene (S)	%	99.9				99.7	97.9	74-125		
1,2-Dichloroethane-d4 (S)	%	91.3				93.1	93.9	70-130		
Toluene-d8 (S)	%	101				101	101	82-118		

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



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

QUALITY CONTROL DATA

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

QC Batch: MSV/3100 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030 Preparation: 12/28/2010 00:00 by LKL
Associated Lab Samples: H10120379001 H10120379005

METHOD BLANK: 87979

Analysis Date/Time Analyst: 12/28/2010 13:44 LKL

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)	%	96		74-125
1,2-Dichloroethane-d4 (S)	%	93.6		70-130
Toluene-d8 (S)	%	101		82-118

LABORATORY CONTROL SAMPLE: 87980

Analysis Date/Time Analyst: 12/28/2010 13:17 LKL

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits
Benzene	ug/l	20	20.1	101	74-123
Ethylbenzene	ug/l	20	21.3	107	72-127
Toluene	ug/l	20	20.5	103	74-126
m,p-Xylene	ug/l	40	42.9	107	71-129
o-Xylene	ug/l	20	20.9	105	74-130
Xylenes, Total	ug/l	60	63.86	106	71-130
4-Bromofluorobenzene (S)	%			96.3	74-125
1,2-Dichloroethane-d4 (S)	%			92.9	70-130
Toluene-d8 (S)	%			101	82-118

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 87981

87982

Original: H10120379005

MS Analysis Date/Time Analyst: 12/28/2010 19:31 LKL

MSD Analysis Date/Time Analyst: 12/28/2010 20:00 LKL

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Benzene	ug/l	350	200	548	539	98.3	93.8	70-124	1.6	20
Ethylbenzene	ug/l	310	200	495	484	93.7	88.7	35-175	2.1	20
Toluene	ug/l	390	200	566	556	90.2	85.5	70-131	1.7	20
m,p-Xylene	ug/l	1900	400	2270	2190	NC	NC	35-175	NC	20

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



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

QUALITY CONTROL DATA

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 87981 87982 Original: H10120379005

MS Analysis Date/Time Analyst: 12/28/2010 19:31 LKL

MSD Analysis Date/Time Analyst: 12/28/2010 20:00 LKL

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
o-Xylene	ug/l	240	200	455	437	105	96.4	35-175	4.0	20
Xylenes, Total	ug/l	2180	600	2721	2626	90.6	74.7	35-175	3.6	20
4-Bromofluorobenzene (S)	%	100				103	99.7	74-125		
1,2-Dichloroethane-d4 (S)	%	93.2				92.7	90.2	70-130		
Toluene-d8 (S)	%	102				99.4	98.2	82-118		

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



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

Legend

(S) - Indicates analyte is a surrogate

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



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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10120379 : COP - Charles Et Al No. 1

Project Number: COP - Charles Et Al No. 1

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
H10120379002	MW-2	SW-846 5030	MSV/3096	SW-846 8260B	MSV/3097
H10120379003	MW-3	SW-846 5030	MSV/3096	SW-846 8260B	MSV/3097
H10120379004	MW-4	SW-846 5030	MSV/3096	SW-846 8260B	MSV/3097
H10120379006	TRIP BLANK	SW-846 5030	MSV/3096	SW-846 8260B	MSV/3097
H10120379001	MW-1	SW-846 5030	MSV/3100	SW-846 8260B	MSV/3101
H10120379005	DUPLICATE	SW-846 5030	MSV/3100	SW-846 8260B	MSV/3101



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

Sample Receipt Checklist

WorkOrder:	H10120379	Received By	LOG
Date and Time	12/18/2010 10:50	Carrier Name:	FEDEXP
Temperature:	3.5°C	Chilled By:	Water Ice

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

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Client Instructions:

