3R - 084

JUN 2010
GWMR

06/10/2011

TETRA TECH, INC.

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

June 10, 2011

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

RE: Farmington B-Com Number 1E Natural Gas Well Site, Farmington, New Mexico. June 2010 Quarterly Groundwater Monitoring Report

Dear Mr. von Gonten:

Enclosed please find a copy of the above-referenced document as compiled by Tetra Tech, Inc., for this Farmington area 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

Enclosures (1)

Cc: Brandon Powell, NMOCD, Aztec, NM
Terry Lauck, ConocoPhillips RM&R

QUARTERLY GROUNDWATER MONITORING REPORT JUNE 2010 SAMPLING EVENT

FARMINGTON B COM NO. 1E NATURAL GAS WELL SITE FARMINGTON, SAN JUAN COUNTY, NEW MEXICO

OCD # 3R0084

API # 30-045-24774

Prepared for:

ConocoPhillips

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. 8690096.100

August 2010

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1.0 INTRODUCTION

This report presents the results of quarterly groundwater monitoring completed by Tetra Tech, Inc. (Tetra Tech) on June 11, 2010, at the ConocoPhillips Company Farmington B Com No. 1E remediation site in Farmington, New Mexico (Site). This sampling event represents the second quarter of groundwater monitoring at the Site for 2010.

The Site is located on private property in southeast Farmington, New Mexico, near the corner of East Murray Drive and South Carlton Avenue. The Site consists of a gas production well and associated equipment and installations. The location and general features of the Site are presented as **Figures 1** and **2**, respectively. A generalized cross section of the site is included as **Figure 3**.

1.1 Site History

The history of the Site is outlined on **Table 1** and discussed in more detail in the following paragraphs.

Conoco Inc., predecessor to ConocoPhillips Company, owned the property and operated the gas well between July 1991 and January 1997. Merrion Oil & Gas Company is the current property owner and well operator. A Phase II Environmental Site Assessment associated with the property transfer was conducted by On Site Technologies, Limited (On Site) in March 1997. Soil hydrocarbon impacts were confirmed north of a production storage tank and west of a separator/dehydrator pit (**Figure 2**). Impacts were described by On Site as limited to a former unlined pit area with hydrocarbon migration primarily occurring vertically through the soil profile due to the porous and permeable subsurface soils; lateral migration was considered minimal (On Site, 1997). Soil excavation of the two impacted areas occurred in September 1997. A total of 906 cubic yards of impacted soil were removed from two excavation areas. Of the 906 cubic yards, 328 were transported offsite and 578 were screened and placed back into the excavated areas along with clean fill. During backfill activities, approximately 10 gallons of liquid fertilizer was sprayed into both excavations to enhance insitu degradation of residual hydrocarbons (On Site, 1997).

Groundwater Monitor Wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6 were installed at the Site in February and August 1998 under the supervision of On Site. During 1998 and 1999, results from groundwater samples collected from MW-2 through MW-6 did not have benzene, toluene, ethylbenzene or total xylenes (BTEX) concentrations in excess of New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards. On Site then requested that groundwater quality monitoring in Monitor Wells MW-2 through MW-6 be discontinued. The request was approved by the New Mexico Energy, Minerals, and Natural Resources Department (NMEMNRD) in a letter to Ms. Shirley Ebert of Conoco Inc. (NMEMNRD, 2000). Although Monitor Wells MW-2 through MW-6

showed no hydrocarbon impacts during 1998 and 1999, light non-aqueous phase liquid (LNAPL) has been present in MW-1 since its installation and recovery has been ongoing. Souder Miller and Associates (Souder Miller) placed active and passive skimmers in MW-1 in May 2004. The passive skimmer collected a small amount of LNAPL; the active skimmer did not collect any LNAPL. Souder Miller determined that an active skimmer was not a viable method of LNAPL in MW-1 and proposed passive skimming or periodic hand bailing for recovery.

Tetra Tech began groundwater quality monitoring at the site in May 2005. Most recently, groundwater quality monitoring took place on June 11, 2010.

2.0 METHODOLOGY AND RESULTS

2.1 Groundwater Monitoring Methodology

Groundwater Elevation Measurements

On June 11, 2010, groundwater elevation measurements were obtained from Monitor Wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6 using a dual interface probe. Groundwater elevations are detailed in **Table 2**. A groundwater elevation contour map is presented as **Figure 4.** Based on June 2010 monitoring event data, groundwater flow is to the west and is consistent with historical records at the Site. The Animas River is approximately ¾ miles from the Site and flows west.

Groundwater sampling

Groundwater samples were obtained from Monitor Wells MW-1 and MW-6 on June 11, 2010. This represents the ninth round of consecutive quarterly groundwater monitoring at the Site. Approximately three well volumes were purged from each monitor well with a dedicated polyethylene 1.5-inch disposable bailer. Groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped under chain of custody documentation to Southern Petroleum Laboratories in Houston, Texas. The samples were analyzed for the presence of BTEX in accordance with Environmental Protection Agency (EPA) Method 8260B and dissolved iron according to EPA Method 6010B. Groundwater sampling field forms are included as **Appendix A**.

2.2 Groundwater Sampling Analytical Results

A sheen was observed in MW-1 during the June 2010 sampling event. Laboratory analysis of groundwater samples from MW-1 did not reveal toluene above laboratory detection limits. Benzene was detected at 1.1 micrograms per liter (µg/L); the NMWQCC standard for benzene is 10 µg/L. Ethylbenzene was detected at a concentration of 98 µg/L; the NMWQCC groundwater quality standard for ethylbenzene is 750 µg/L. Total xylenes were detected at 1.8 µg/L; the NMWQCC groundwater quality standard for total xylenes is 620 µg/L. Dissolved iron was detected at a concentration of 0.0217 milligrams per liter (mg/L) in MW-1, the NMWQCC groundwater quality standard for iron is 1.0 mg/L. Laboratory analysis of groundwater samples from MW-6 revealed that neither BTEX nor dissolve iron exceeded laboratory detection limits. **Table 3** presents the laboratory analytical results. The laboratory analytical reports are included as **Appendix B**, and a BTEX concentration map is included as **Figure 5.** The SMA historical analytical data is attached as **Appendix C**.

3.0 CONCLUSIONS

Although a hydrocarbon sheen was observed in Monitor Well MW-1 during the monitoring event; BTEX constituents were either below laboratory detection limits or below NMWQCC groundwater quality standards. The last sampling event that LNAPL was observed in MW-1 was March 2010. However, an LNAPL sheen was intermittently detectable during quarterly groundwater pumping events from 2005 into 2008 and is shown in a hydrograph of groundwater elevations in MW-1 and MW-6 (**Figure 6**). Generally, if MW-1 does not have an oil absorbent sock, a sheen or measureable LNAPL is observed at various times of the year and at various depths.

Groundwater analytical results for Monitor Wells MW-1 and MW-6 continue to show BTEX concentrations below NMWQCC groundwater quality standards. Tetra Tech recommends continued quarterly groundwater sampling at the Site in order to provide sufficient data for Site closure. Site closure will be requested when groundwater sample analytical results are consistently below NMWQCC groundwater quality standards. Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetratech.com if you have any questions or require additional information.

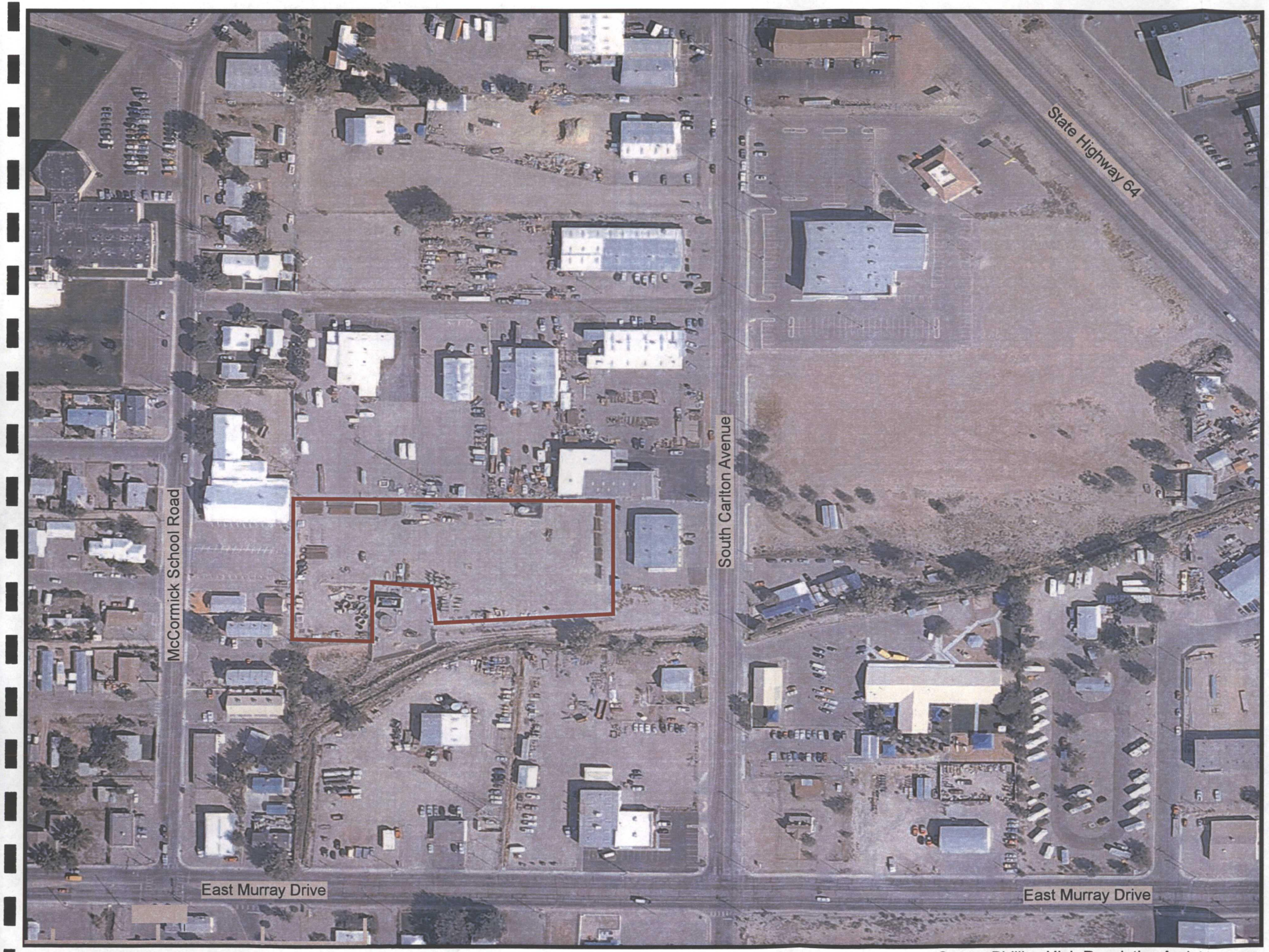
4.0 REFERENCES

New Mexico Energy, Minerals, and Natural Resources Department. (2000). *Re: Farmington B Com #1E Well Site*. Letter to Ms. Shirley Ebert, Conoco, Inc. December 13, 2000.

On-Site Technologies, Ltd. (1997). *Annual Summary, Pit Closures and Groundwater Impact Updates, State of New Mexico, 1996*. Prepared for Conoco Inc., Midland Division. Report dated April 22, 1997. 21 pp.

On-Site Technologies, Ltd. (1997). *Re: Remediation Summary Farmington B Com #1E.* . Letter Attn: Mr. Neal Goates, Senior Environmental Specialist, Conoco, Inc. November 26, 1997.

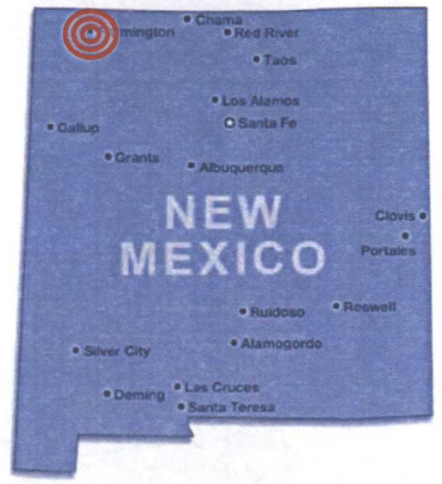
FIGURES



ConocoPhillips High Resolution Aerial imagery

FIGURE 1.

Site Location Map
Farmington
B Com No.1E
Farmington, NM



ConocoPhillips
Company B Com #1E
Site Location

Feet
0 150 300

Section 15, T29N, R13W
San Juan County, NM

N

TETRA TECH, INC.

FIGURE 2:
SITE LAYOUT MAP

FARMINGTON
B COM NO. 1E
Section 15, T29N, R13W
San Juan County, NM

LEGEND

- WELLHEAD
- MONITORING WELL
- FENCE
- FORMER SEPARATOR/DEHYDRATOR
- FORMER SEPARATOR/DEHYDRATOR PIT
- EXISTING MERRION OIL EQUIPMENT
- FORMER PIT EXCAVATION

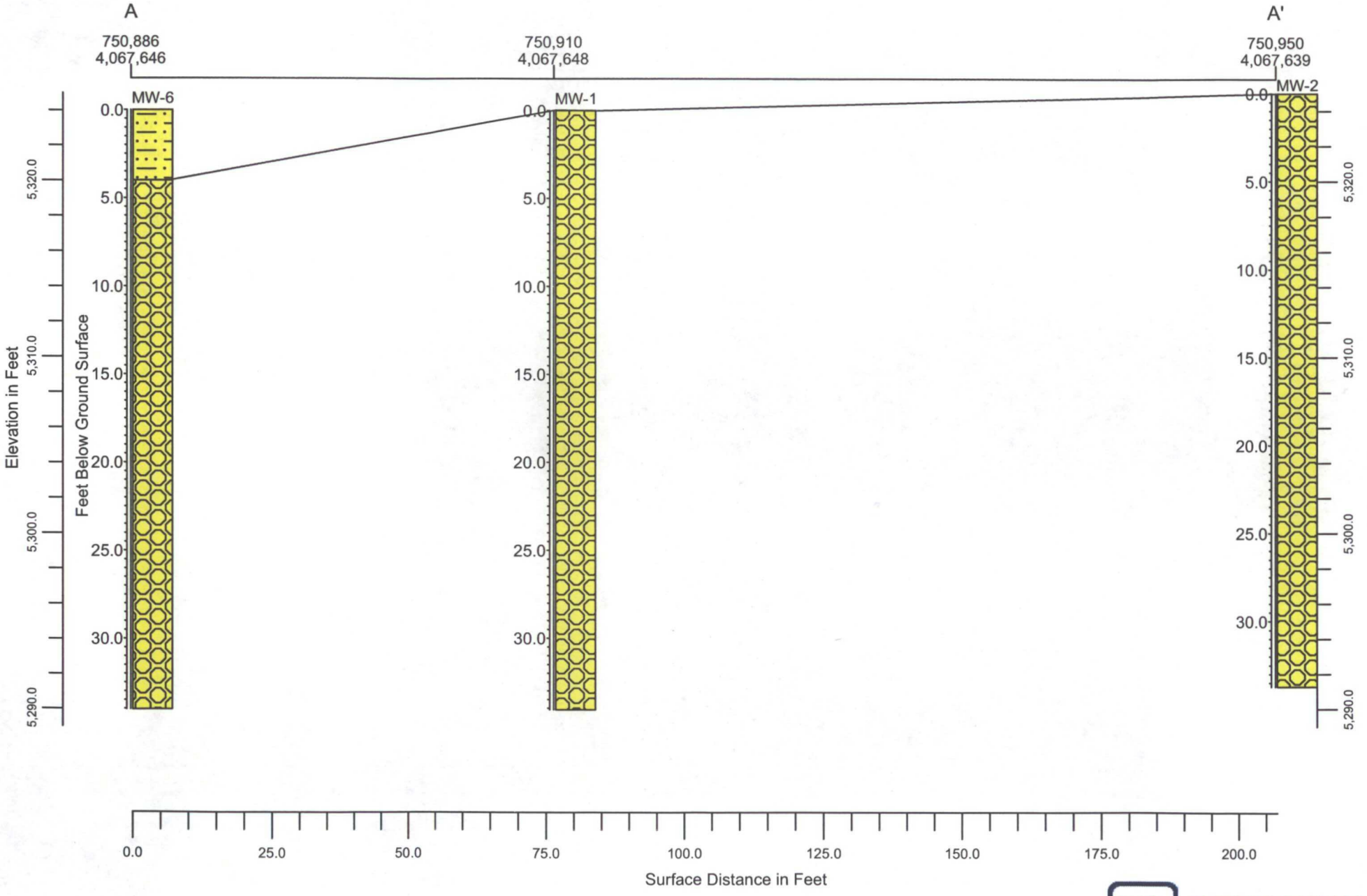
0 40 80
FEET

N

TETRA TECH, INC.

Figure 3.

B Com No. 1E - Cross-Section A-A'



5/24/2010

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FIGURE 4:
GROUNDWATER ELEVATION CONTOUR MAP
6/11/2010
FARMINGTON B COM NO. 1E
Section 15, T29N, R13W
San Juan County, NM

LEGEND

- WELLHEAD
- MONITORING WELL
- FENCE
- GW CONTOUR LINE
- INFERRED GW CONTOUR LINE
- FORMER SEPARATOR/DEHYDRATOR
- FORMER SEPARATOR/DEHYDRATOR PIT
- EXISTING MERRION OIL PRODUCED WATER AND CONDENSATE TANKS
- FORMER PIT EXCAVATION

N

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FIGURE 5:
BTEX CONCENTRATION MAP
6/11/2010
FARMINGTON
B COM NO. 1E
Section 15, T29N, R13W
San Juan County, NM

LEGEND

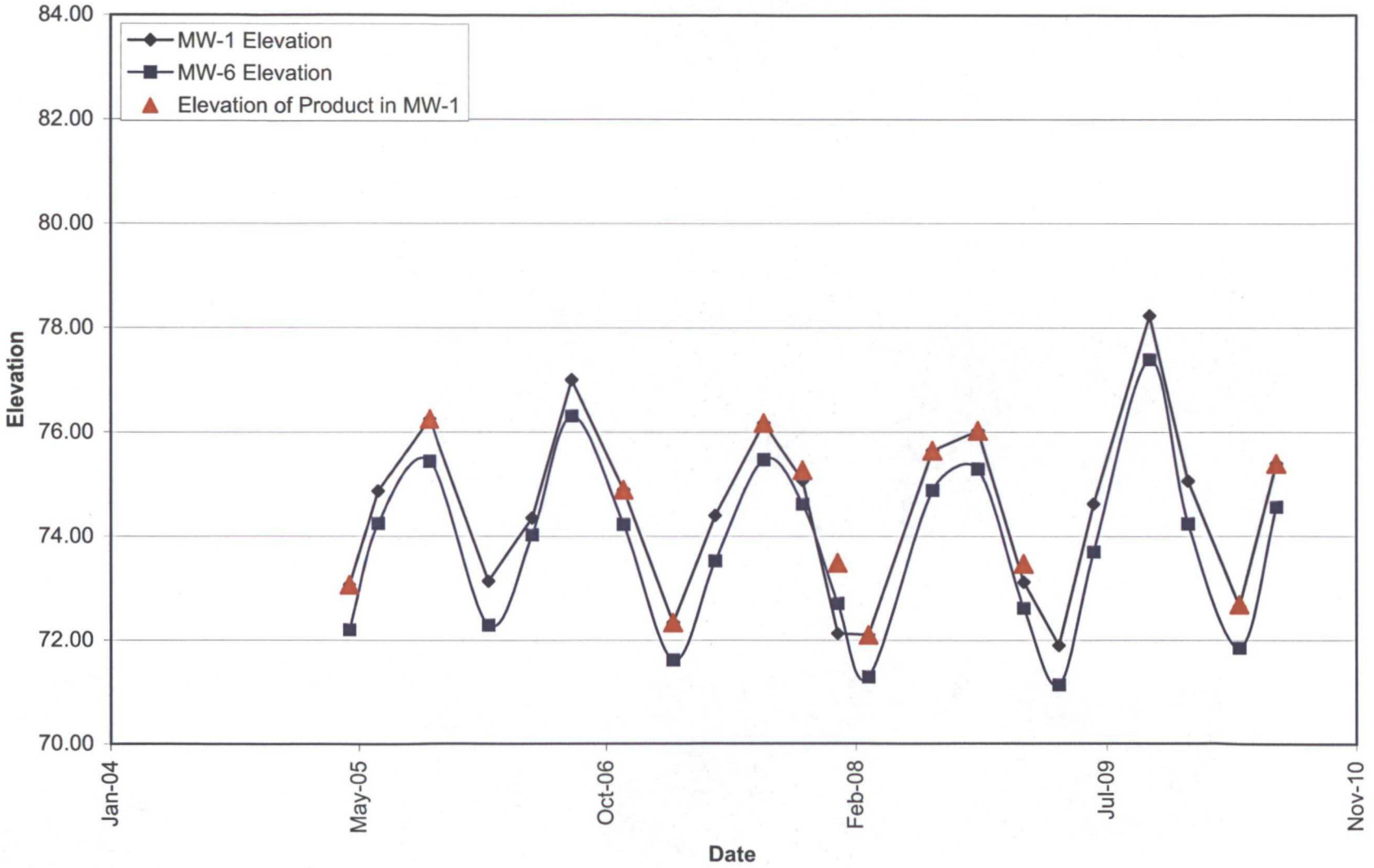
- WELLHEAD
- MONITORING WELL
- FENCE
- FORMER SEPARATOR/DEHYDRATOR
- FORMER SEPARATOR/DEHYDRATOR PIT
- EXISTING MERRION OIL PRODUCED WATER AND CONDENSATE TANKS
- FORMER PIT EXCAVATION

0 40 80
FEET

N

TETRA TECH, INC.

FIGURE 6
FARMINGTON B-COM NO. 1E HYDROGRAPH



TABLES

Table 1. Site History Timeline - Farmington B Com No. 1E

Date/Time Period	Event/Action	Description
February 18, 1982	Well Completed	Pioneer Production Corp. completed the Farmington B-COM No. 1E gas production well
July 1, 1991	Conoco Inc. well purchase	Conoco Inc. purchases wellsite from Mesa Operating Limited Partnership of Amarillo, Texas
January 1, 1997	Change of ownership	Conoco Inc. sold the property and mineral lease to Merrion Oil & Gas Co.
March, 1997	Site Assessment	Phase II Environmental Site Assessment is conducted by On Site Technologies.Three test holes advanced with Auger refusal encountered at 7 feet below ground surface (bgs) due to gravel and cobbles. No samples collected. On Site Technologies later excavates four additional test holes ranging in depth from 14 to 19 feet bgs. Soil samples are collected from each excavation. TPH and BTEX contamination is found in the vicinity of a former unlined pit.
September, 1997	Soil Excavation	On Site Technologies oversees soil excavation of two pits. 906 cubic yards of impacted soil were removed; of which 328 were disposed of offsite and 578 cubic yards were placed back in the pits along with clean fill. Approximately 10 gallons of liquid fertilizer was sprayed into each pit during backfill.
February and August 1998	Monitor Well Installation	Six monitor wells (MW-1 through MW-6) installed at the site under the supervision of On Site.
October 29, 2004	Groundwater Removal from Monitor Well MW-1	First removal of groundwater - 160 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
November 1, 2004	Groundwater Removal from Monitor Well MW-1	40 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
December 3, 2004	Groundwater Removal from Monitor Well MW-1	150 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
May 9th and 10th, 2005	Monitor Well Sampling	Tetra Tech begins quarterly monitoring at the site. Groundwater samples collected from monitor wells MW-1 and MW-6. A sheen is noted in MW-1; an oil absorbant sock is placed in the well.
July 6, 2005	Groundwater Removal from Monitor Well MW-1	138 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
October 19, 2005	Groundwater Removal from Monitor Well MW-1 and Monitor Well Sampling	Groundwater samples collected from monitor wells MW-1 and MW-6. 186 gallons removed from MW-1; a sheen is observed in purge water and oil absorbant sock is replaced.
February 16, 2006	Groundwater Removal from Monitor Well MW-1	144 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
May 15, 2006		152 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
August 2, 2006		457 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
November 14, 2006		423 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
November 14, 2006	Monitor Well Sampling	Third sampling of monitor wells MW-1 and MW-6 conducted by Tetra Tech
February 20, 2007	Groundwater Removal from Monitor Well MW-1	220 gallons removed vacuum truck operated by Riley Industrial Services of Farmington, NM
May 15, 2007		364 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
August 21, 2007		684 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
November 7, 2007		651 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
November 7, 2007	Monitor Well Sampling	Fourth sampling of monitor wells MW-1 and MW-6 conducted by Tetra Tech
January 16, 2008	Groundwater Removal from Monitor Well MW-1	149 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
March 18, 2008	Groundwater Removal from Monitor Well MW-1	93 gallons removed by vacuum truck operated by Riley Industrial Services of Farmington, NM
July 24, 2008	Monitor Well Sampling	Initiation of quarterly sampling for monitor wells MW-1and MW-6
October 22, 2008	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6

Table 1. Site History Timeline - Farmington B Com No. 1E

Date/Time Period	Event/Action	Description
January 21, 2009	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6. Free product found in MW-1; oil absorbent sock placed in the well.
April 1, 2009	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6. No free product detected in MW-1.
June 10, 2009	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6. No free product detected in MW-1.
October 1, 2009	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6. No free product detected in MW-1. **First quarter of compliance** with all COCs bellow NMWQCC standards.
December 17, 2009	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6. No free product detected in MW-1. **Second quarter of compliance** with all COCs bellow NMWQCC standards.
March 29, 2010	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6. A thin hydrocarbon sheen is detected in MW-1.
June 11, 2010	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1 and MW-6. A thin hydrocarbon sheen is detected in MW-1.

Table 2. Farmington B Com #1E
Groundwater Elevation Summary

Well ID	Total Depth (ft. bgs)	Screen Interval (ft)	*Elevation (ft.) (TOC)	Date Measured	Depth to Water (ft. below TOC)	Depth to Product (ft. below TOC)**	Relative Groundwater Elevation (ft TOC)
MW-1	34.09	19.09 - 34.09	101.37	5/9/2005	28.30	Sheen	73.07
				7/6/2005	26.50	NA	74.87
				10/19/2005	25.12	Sheen	76.25
				2/16/2006	28.23	NA	73.14
				5/15/2006	27.02	NA	74.35
				8/2/2006	24.37	NA	77.00
				11/14/2006	26.48	Sheen	74.89
				2/20/2007	29.03	Sheen	72.34
				5/15/2007	26.97	NA	74.40
				8/21/2007	25.20	Sheen	76.17
				11/7/2007	26.30	26.1	75.07
				1/16/2008	29.24	27.88	72.13
				3/18/2008	29.27	29.27	72.10
				7/24/2008	25.73	Sheen	75.64
				10/22/2008	25.35	Sheen	76.02
				1/21/2009	28.25	27.90	73.12
				4/1/2009	29.47	NA	71.90
				6/10/2009	26.75	NA	74.62
				10/1/2009	23.14	NA	78.23
				12/17/2009	26.31	NA	75.06
				3/29/2010	28.71	28.68	72.66
				6/11/2010	25.98	Sheen	75.39
MW-2	33.72	18.72 - 33.72	101.57	5/9/2005	27.28	NA	74.29
				7/6/2005	25.52	NA	76.05
				10/19/2005	24.30	NA	77.27
				2/16/2006	27.38	NA	74.19
				5/15/2006	25.62	NA	75.95
				8/2/2006	23.51	NA	78.06
				11/14/2006	26.08	NA	75.49
				2/20/2007	28.13	NA	73.44
				5/15/2007	25.86	NA	75.71
				8/21/2007	24.45	NA	77.12
				11/7/2007	25.31	NA	76.26
				1/16/2008	27.27	NA	74.30
				3/18/2008	28.68	NA	72.89
				7/24/2008	24.77	NA	76.80
				10/22/2008	24.55	NA	77.02
				1/21/2009	27.23	NA	74.34
				4/1/2009	28.76	NA	72.81
				6/10/2009	25.76	NA	75.81
				10/1/2009	22.22	NA	79.35
				12/17/2009	25.62	NA	75.95
				3/29/2010	27.96	NA	73.61
				6/11/2010	24.99	NA	76.58

Table 2. Farmington B Com #1E
Groundwater Elevation Summary

Well ID	Total Depth (ft. bgs)	Screen Interval (ft)	*Elevation (ft.) (TOC)	Date Measured	Depth to Water (ft. below TOC)	Depth to Product (ft. below TOC)**	Relative Groundwater Elevation (ft TOC)
MW-3	32.44	17.44 - 32.44	102.1	5/9/2005	27.81	NA	74.29
				7/6/2005	26.03	NA	76.07
				10/19/2005	25.06	NA	77.04
				2/16/2006	28.57	NA	73.53
				5/15/2006	26.15	NA	75.95
				8/2/2006	23.83	NA	78.27
				11/14/2006	26.75	NA	75.35
				2/20/2007	29.31	NA	72.79
				5/15/2007	26.23	NA	75.87
				8/21/2007	25.00	NA	77.10
				11/7/2007	26.12	NA	75.98
				1/16/2008	28.46	NA	73.64
				3/18/2008	29.97	NA	72.13
				7/24/2008	25.27	NA	76.83
				10/22/2008	25.35	NA	76.75
				1/21/2009	28.56	NA	73.54
				4/1/2009	30.20	NA	71.90
				6/10/2009	26.55	NA	75.55
				10/1/2009	23.00	NA	79.10
				12/17/2009	26.86	NA	75.24
				3/29/2010	29.41	NA	72.69
				6/11/2010	25.62	NA	76.48
MW-4	32.72	17.72 - 32.72	101.4	5/9/2005	28.73	NA	72.67
				7/6/2005	26.66	NA	74.74
				10/19/2005	25.62	NA	75.78
				2/16/2006	28.91	NA	72.49
				5/15/2006	26.86	NA	74.54
				8/2/2006	24.59	NA	76.81
				11/14/2006	27.02	NA	74.38
				2/20/2007	29.61	NA	71.79
				5/15/2007	27.25	NA	74.15
				8/21/2007	25.56	NA	75.84
				11/7/2007	26.50	NA	74.90
				1/16/2008	28.55	NA	72.85
				3/18/2008	29.99	NA	71.41
				7/24/2008	26.02	NA	75.38
				10/22/2008	25.84	NA	75.56
				1/21/2009	28.69	NA	72.71
				4/1/2009	30.22	NA	71.18
				6/10/2009	27.31	NA	74.09
				10/1/2009	23.80	NA	77.60
				12/17/2009	27.07	NA	74.33
				3/29/2010	29.51	NA	71.89
				6/11/2010	26.43	NA	74.97

Table 2. Farmington B Com #1E
Groundwater Elevation Summary

Well ID	Total Depth (ft. bgs)	Screen Interval (ft)	*Elevation (ft.) (TOC)	Date Measured	Depth to Water (ft. below TOC)	Depth to Product (ft. below TOC)**	Relative Groundwater Elevation (ft TOC)
MW-5	34.09	19.09 - 34.09	100.52	5/9/2005	28.50	NA	72.02
				7/6/2005	26.32	NA	74.20
				10/19/2005	25.30	NA	75.22
				2/16/2006	28.62	NA	71.90
				5/15/2006	26.55	NA	73.97
				8/2/2006	24.23	NA	76.29
				11/14/2006	27.67	NA	72.85
				2/20/2007	29.34	NA	71.18
				5/15/2007	27.04	NA	73.48
				8/21/2007	25.21	NA	75.31
				11/7/2007	26.13	NA	74.39
				1/16/2008	28.18	NA	72.34
				3/18/2008	29.65	NA	70.87
				7/24/2008	25.73	NA	74.79
				10/22/2008	25.49	NA	75.03
				1/21/2009	28.38	NA	72.14
				4/1/2009	29.92	NA	70.60
				6/10/2009	27.09	NA	73.43
				10/1/2009	23.50	NA	77.02
				12/17/2009	26.77	NA	73.75
				3/29/2010	29.21	NA	71.31
				6/11/2010	26.16	NA	74.36
MW-6	34.02	19.02 - 34.02	102.14	5/9/2005	29.94	NA	72.20
				7/6/2005	27.89	NA	74.25
				10/19/2005	26.70	NA	75.44
				2/16/2006	29.85	NA	72.29
				5/15/2006	28.11	NA	74.03
				8/2/2006	25.83	NA	76.31
				11/14/2006	27.91	NA	74.23
				2/20/2007	30.52	NA	71.62
				5/15/2007	28.61	NA	73.53
				8/21/2007	26.67	NA	75.47
				11/7/2007	27.52	NA	74.62
				1/16/2008	29.43	NA	72.71
				3/18/2008	30.85	NA	71.29
				7/24/2008	27.26	NA	74.88
				10/22/2008	26.85	NA	75.29
				1/21/2009	29.52	NA	72.62
				4/1/2009	31.00	NA	71.14
				6/10/2009	28.44	NA	73.70
				10/1/2009	24.75	NA	77.39
				12/17/2009	27.90	NA	74.24
				3/29/2010	30.29	NA	71.85
				6/11/2010	27.58	NA	74.56

ft. = Feet
TOC = Top of casing
bgs = below ground surface
* Relative Elevation
** Where non-aqueous phase liquid (NAPL) is present, depth to water equals the Top of Casing elevation minus the depth to water, plus the NAPL thickness multiplied by 0.79.
NA - not applicable or not measured.

Table 3. Farmington B Com No.1E Groundwater Laboratory Analytical Results Summary

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	Iron (mg/L)
MW-1	2/19/1998	**210**	34	370	**2,044**	NS	NS	NS
	6/12/1998	3" free product in bailer - not sampled						
	9/15/1998	free product - not sampled						
	12/29/1998	**350**	BDL	420	**2,800**	NS	NS	NS
	1/22/2004	free product - not sampled						
	5/9/2005	**17**	<0.7	74	250	<0.40	77.8	14.9*
	10/19/2005	**34**	<1.0	170	**1400**	0.15	39.9	15*
	11/14/2006	**18**	<0.7	190	**1600**	<0.015	145	8.8*
	11/7/2007	7	<0.7	120	250	<0.015	38.4	6.4*
	7/24/2008	<5.0	<5.0	90	35	<0.5	4.76	17.2*
	Duplicate	<5.0	<5.0	110	59	NS	NS	NS
	10/22/2008	<5.0	<5.0	88	165	<0.5	17	21.1*
	Duplicate	<5.0	<5.0	95	186	NS	NS	NS
	1/21/2009	free product - not sampled						
	4/1/2009	<5.0	<5.0	11	<5.0	NS	NS	5.26*
	6/10/2009	<5.0	<5.0	96	<5.0	NS	NS	9.8*
	10/1/2009	1.3	<1.0	58	142	NS	NS	0.233
	12/17/2009	1.4	<1.0	100	2.8	NS	NS	0.521
	3/29/2010	<1.0	<1.0	51	<1.0	NS	NS	0.0803
	6/11/2010	1.1	<1.0	98	1.8	NS	NS	0.0217
MW-6	9/15/1998	BDL	BDL	BDL	BDL	NS	NS	NS
	12/29/1998	BDL	BDL	BDL	BDL	NS	NS	NS
	3/3/1999	BDL	BDL	BDL	BDL	NS	NS	NS
	6/15/1999	BDL	BDL	BDL	BDL	NS	NS	NS
	9/15/1999	BDL	0.7	1.1	BDL	NS	NS	NS
	12/14/1999	BDL	1.8	0.7	1.9	NS	NS	NS
	1/22/2004	BDL	BDL	BDL	BDL	NS	NS	NS
	5/9/2005	<0.5	<0.7	<0.8	<0.8	<0.4	97	15.9*
	10/19/2005	<0.5	<0.7	<0.8	<0.8	5.4	52.6	1.4*
	11/14/2006	<0.5	<0.7	<0.8	1	<0.015	159	5.8*
	11/7/2007	<0.5	<0.7	<0.8	<0.8	<0.015	112	3*
	7/24/2008	<5.0	<5.0	<5.0	<5.0	<0.5	44.4	28.5*
	10/22/2008	<5.0	<5.0	<5.0	<5.0	<0.5	43.7	1.77*
	1/21/2009	<5.0	<5.0	<5.0	<5.0	<0.5	31.1	9.59*
	4/1/2009	<5.0	<5.0	<5.0	<5.0	NS	NS	16.2*
	6/10/2009	<5.0	<5.0	<5.0	<5.0	NS	NS	3.86*
	10/1/2009	<1.0	<1.0	<1.0	<1.0	NS	NS	<0.02
	12/17/2009	<1.0	<1.0	<1.0	<1.0	NS	NS	0.0511
	3/29/2010	<1.0	<1.0	<1.0	<1.0	NS	NS	<0.0200
	6/11/2010	<1.0	<1.0	<1.0	<1.0	NS	NS	<0.0200
NMWQCC Standards		**10 (µg/L)**	**750 (µg/L)**	**750 (µg/L)**	**620 (µg/L)**	**10 (mg/L)**	**600 (mg/L)**	**1 (mg/L)**

NMWQCC = New Mexico Water Quality Control Commission
mg/L = milligrams per liter (parts per million)
µg/L = micrograms per liter (parts per billion)
NE=Not Established
NS = not sampled

BDL = Below laboratory detection limits
<0.7 = Below laboratory detection limit of 0.7 µg/L
* = Results reported for total ferrous iron, not comparable to NMWQCC standard for dissolved iron

APPENDIX A
GROUNDWATER SAMPLING FIELD FORMS

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name B Com 1E Page 1 of 2

ect No.

Site Location Farmington, NM

Site/Well No. MW-1 Coded/ Replicate No. 0810 Date 6/11/10

Weather Sunny, warm breezy Time Sampling Began ~~150~~ 155 Time Sampling Completed 0805

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface MP Elevation

Total Sounded Depth of Well Below MP 34.09 Water-Level Elevation

Held Depth to Water Below MP 25.98 Diameter of Casing 2"

Wet Water Column in Well 8.11 Gallons Pumped/Bailed Prior to Sampling 2A

Gallons per Foot 0.16

Gallons in Well 1.2976 Sampling Pump Intake Setting (feet below land surface)

Purging Equipment Purge pump / Bailer X3 = 3.8928

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity (µS/cm³)	TDS (g/L)	DO (mg/L)	DO %	ORP (mV)	Volume (gal.)

Sampling Equipment Purge Pump/Bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 40mL VOA's	HCl
Fe	1 16 oz plastic	none

Remarks H2O is light gray with continuous yellow green / No parameters taken due to green

Sampling Personnel CM & CB

Well Casing Volumes

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

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name B Com 1E — Page 2 of 2

ect No.

Site Location Farmington, NM

Site/Well No. MW-6 — Coded/ Replicate No. — Date 6-11-10

Weather Sunny, breezy, warm — Time Sampling Began 0724 — Time Sampling Completed 0740

EVACUATION DATA

Description of Measuring Point (MP) Top of Casing

Height of MP Above/Below Land Surface — MP Elevation

Total Sounded Depth of Well Below MP 34.02 — Water-Level Elevation

Held — Depth to Water Below MP 27.58 — Diameter of Casing 2"

Wet — Water Column in Well 6.44 — Gallons Pumped/Bailed Prior to Sampling 3.25

Gallons per Foot 0.16

Gallons in Well 1.634 x 3 = 3.09 — Sampling Pump Intake Setting (feet below land surface)

Purging Equipment Purge pump / Bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (°C)	pH	Conductivity (µS/cm³)	TDS (g/L)	DO (mg/L)	DO %	ORP (mV)	Volume (gal.)
0732	15.01	6.87	0.987	—	2.63	25.0	164.4	2.25
0735	14.99	6.81	0.995	—	1.97	19.5	163.3	2.5
0736	15.00	6.79	0.993	—	1.63	16.0	161.7	3.0

Sampling Equipment Purge Pump/Bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 40mL VOA's	HCl
Fe	1 16 oz plastic	none

Remarks light tan-brown, no odor, no sheen

Sampling Personnel CM & CB

Well Casing Volumes

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

APPENDIX B

LABORATORY ANALYTICAL REPORT

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

Certificate of Analysis

June 29, 2010

Workorder: H10060335

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

Project: COP - B Com #1E

Project Number: COP - B Com #1E

Site: COP - B Com #1E, Farmington, NM

PO Number: ENFOS

NELAC Cert. No.: T104704205-09-1

This Report Contains A Total Of 15 Pages

Excluding Any Attachments

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June 29, 2010

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Kelly Blanchard
Tetra Tech
6121 Indian School Road NE
Suite 200
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Project: COP - B Com #1E

Project Number: COP - B Com #1E

Site: COP - B Com #1E, Farmington, NM

PO Number: ENFOS

NELAC Cert. No.: T104704205-09-1

I. SAMPLE RECEIPT:

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

II: ANALYSES AND EXCEPTIONS:

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

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

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

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

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

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

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

SPL Inc.
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Certificate of Analysis

June 29, 2010

Workorder: H10060335

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

Project: COP - B Com #1E

Project Number: COP - B Com #1E

Site: COP - B Com #1E, Farmington, NM

PO Number: ENFOS

NELAC Cert. No.: T104704205-09-1

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

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

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

Erica Cardenas, Senior Project Manager

Enclosures

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

SAMPLE SUMMARY

Workorder: H10060335 : COP - B Com #1E

Project Number: COP - B Com #1E

Lab ID	Sample ID	Matrix	COC ID	Date/Time Collected	Date/Time Received
H10060335001	MW-1	Water		6/11/2010 08:05	6/15/2010 09:00
H10060335002	MW-6	Water		6/11/2010 07:40	6/15/2010 09:00
H10060335003	DUPLICATE	Water		6/11/2010 08:10	6/15/2010 09:00
H10060335004	TRIP BLANK	Water		6/14/2010 11:00	6/15/2010 09:00

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ANALYTICAL RESULTS

Workorder: H10060335 : COP - B Com #1E | Project Number: COP - B Com #1E

Lab ID: **H10060335001** | Date/Time Received: 6/15/2010 09:00 | Matrix: Water

Sample ID: **MW-1** | Date/Time Collected: 6/11/2010 08:05

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B | Preparation Batches: Batch: 1829 SW-846 3010A on 06/15/2010 16:00 by R_V | Analytical Batches: Batch: 1467 SW-846 6010B on 06/26/2010 16:35 by EBG

Parameters	Results mg/l	Qual	Report Limit	MDL	DF	RegLmt	Batch Information Prep	Analysis
Iron	0.0217		0.0200	0.00640	1		1829	1467

VOLATILES

Analysis Desc: SW-846 8260B | SW-846 5030Analytical Batches: Batch: 2071 SW-846 8260B on 06/21/2010 22:38 by LKL

Parameters	Results ug/l	Qual	Report Limit	MDL	DF	RegLmt	Batch Information Prep	Analysis
Benzene	1.1		1.0	0.10	1			2071
Ethylbenzene	98		1.0	0.15	1			2071
Toluene	ND		1.0	0.29	1			2071
m,p-Xylene	1.8		1.0	0.18	1			2071
o-Xylene	ND		1.0	0.13	1			2071
Xylenes, Total	1.8		1.0	0.13	1			2071
4-Bromofluorobenzene (S)	105 %		74-125		1			2071
1,2-Dichloroethane-d4 (S)	90.9 %		70-130		1			2071
Toluene-d8 (S)	94.8 %		82-118		1			2071

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ANALYTICAL RESULTS

Workorder: H10060335 : COP - B Com #1E | Project Number: COP - B Com #1E

Lab ID: **H10060335002** | Date/Time Received: 6/15/2010 09:00 | Matrix: Water

Sample ID: **MW-6** | Date/Time Collected: 6/11/2010 07:40

ICP DISSOLVED METALS

Analysis Desc: SW-846 6010B | Preparation Batches: Batch: 1829 SW-846 3010A on 06/15/2010 16:00 by R_V | Analytical Batches: Batch: 1467 SW-846 6010B on 06/26/2010 17:08 by EBG

Parameters	Results mg/l	Qual	Report Limit	MDL	DF	RegLmt	Batch Information Prep	Batch Information Analysis
Iron	ND		0.0200	0.00640	1		1829	1467

VOLATILES

Analysis Desc: SW-846 8260B | SW-846 5030Analytical Batches: Batch: 2071 SW-846 8260B on 06/21/2010 14:32 by LKL

Parameters	Results ug/l	Qual	Report Limit	MDL	DF	RegLmt	Batch Information Prep	Batch Information Analysis
Benzene	ND		1.0	0.10	1			2071
Ethylbenzene	ND		1.0	0.15	1			2071
Toluene	ND		1.0	0.29	1			2071
m,p-Xylene	ND		1.0	0.18	1			2071
o-Xylene	ND		1.0	0.13	1			2071
Xylenes, Total	ND		1.0	0.13	1			2071
4-Bromofluorobenzene (S)	103 %		74-125		1			2071
1,2-Dichloroethane-d4 (S)	91.3 %		70-130		1			2071
Toluene-d8 (S)	95.9 %		82-118		1			2071

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ANALYTICAL RESULTS

Workorder: H10060335 : COP - B Com #1E | Project Number: COP - B Com #1E

Lab ID: **H10060335003** | Date/Time Received: 6/15/2010 09:00 | Matrix: Water

Sample ID: **DUPLICATE** | Date/Time Collected: 6/11/2010 08:10

VOLATILES

Analysis Desc: SW-846 8260B | SW-846 5030Analytical Batches:

Batch: 2071 SW-846 8260B on 06/21/2010 23:06 by LKL

Parameters	Results ug/l	Qual	Report Limit	MDL	DF	RegLmt	Batch Information Prep	Analysis
Benzene	ND		1.0	0.10	1			2071
Ethylbenzene	97		1.0	0.15	1			2071
Toluene	ND		1.0	0.29	1			2071
m,p-Xylene	1.1		1.0	0.18	1			2071
o-Xylene	ND		1.0	0.13	1			2071
Xylenes, Total	1.1		1.0	0.13	1			2071
4-Bromofluorobenzene (S)	99.8 %		74-125		1			2071
1,2-Dichloroethane-d4 (S)	89.7 %		70-130		1			2071
Toluene-d8 (S)	95.9 %		82-118		1			2071

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ANALYTICAL RESULTS

Workorder: H10060335 : COP - B Com #1E | Project Number: COP - B Com #1E

Lab ID: **H10060335004** | Date/Time Received: 6/15/2010 09:00 | Matrix: Water

Sample ID: **TRIP BLANK** | Date/Time Collected: 6/14/2010 11:00

VOLATILES

Analysis Desc: SW-846 8260B | SW-846 5030 Analytical Batches: Batch: 2071 SW-846 8260B on 06/21/2010 19:57 by LKL

Parameters	Results ug/l	Qual	Report Limit	MDL	DF	RegLmt	Batch Information Prep	Analysis
Benzene	ND		1.0	0.10	1			2071
Ethylbenzene	ND		1.0	0.15	1			2071
Toluene	ND		1.0	0.29	1			2071
m,p-Xylene	ND		1.0	0.18	1			2071
o-Xylene	ND		1.0	0.13	1			2071
Xylenes, Total	ND		1.0	0.13	1			2071
4-Bromofluorobenzene (S)	105 %		74-125		1			2071
1,2-Dichloroethane-d4 (S)	94.6 %		70-130		1			2071
Toluene-d8 (S)	96 %		82-118		1			2071

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QUALITY CONTROL DATA

Workorder: H10060335 : COP - B Com #1E — Project Number: COP - B Com #1E

QC Batch: DIGM/1829 — Analysis Method: SW-846 6010B

QC Batch Method: SW-846 3010A — Preparation: 06/15/2010 16:00 by R_V

Associated Lab Samples: H10060328001 H10060328002 H10060328003 H10060328004 H10060335001 H10060335002 H10060336001 H10060336002 H10060336003 H10060336004

METHOD BLANK: 51057

Analysis Date/Time Analyst: 06/26/2010 15:12 EBG

Parameter	Units	Blank Result	Qualifiers	Reporting Limit
Iron	mg/l	ND		0.0200

LABORATORY CONTROL SAMPLE: 51058

Analysis Date/Time Analyst: 06/26/2010 15:18 EBG

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits
Iron	mg/l	1.0	1.045	104	80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 51059 51060 Original: H10060328001

MS Analysis Date/Time Analyst: 06/26/2010 15:29 EBG

MSD Analysis Date/Time Analyst: 06/26/2010 15:35 EBG

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Iron	mg/l	0.0345	1.0	1.063	1.043	103	101	75-125	1.9	20

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

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QUALITY CONTROL DATA

Workorder: H10060335 : COP - B Com #1E

Project Number: COP - B Com #1E

QC Batch: MSV/2070

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030

Preparation: 06/21/2010 00:00 by LKL

Associated Lab Samples: H10060335001 H10060335002 H10060335003 H10060335004 H10060336001 H10060336003 H10060336004 H10060336005

METHOD BLANK: 52265

Analysis Date/Time Analyst: 06/21/2010 13:36 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)	%	103		74-125
1,2-Dichloroethane-d4 (S)	%	92.7		70-130
Toluene-d8 (S)	%	96.1		82-118

LABORATORY CONTROL SAMPLE: 52266

Analysis Date/Time Analyst: 06/21/2010 12:43 LKL

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits
Benzene	ug/l	20	21.7	109	74-123
Ethylbenzene	ug/l	20	20.4	102	72-127
Toluene	ug/l	20	21.5	107	74-126
m,p-Xylene	ug/l	40	40.7	102	71-129
o-Xylene	ug/l	20	20.4	102	74-130
Xylenes, Total	ug/l	60	61.07	102	71-130
4-Bromofluorobenzene (S)	%			105	74-125
1,2-Dichloroethane-d4 (S)	%			96.1	70-130
Toluene-d8 (S)	%			96.5	82-118

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 52267 52268 Original: H10060335002

MS Analysis Date/Time Analyst: 06/21/2010 14:58 LKL

MSD Analysis Date/Time Analyst: 06/21/2010 15:24 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	21.2	21.4	106	107	70-124	0.9	20
Ethylbenzene	ug/l	ND	20	18.4	19.0	92.2	94.8	35-175	2.8	20
Toluene	ug/l	ND	20	20.3	19.3	101	96.5	70-131	4.9	20

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

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QUALITY CONTROL DATA

Workorder: H10060335 : COP - B Com #1E Project Number: COP - B Com #1E

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 52267 52268 Original: H10060335002

MS Analysis Date/Time Analyst: 06/21/2010 14:58 LKL

MSD Analysis Date/Time Analyst: 06/21/2010 15:24 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	37.3	37.3	93.3	93.2	35-175	0.1	20
o-Xylene	ug/l	ND	20	19.1	19.0	95.4	94.8	35-175	0.6	20
Xylenes, Total	ug/l	ND	60	56.41	56.26	94.0	93.8	35-175	0.3	20
4-Bromofluorobenzene (S)	%	103				102	101	74-125		30
1,2-Dichloroethane-d4 (S)	%	91.3				92.2	94.5	70-130		30
Toluene-d8 (S)	%	95.9				97.0	91.3	82-118		30

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

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Legend

(S) - Indicates analyte is a surrogate

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10060335 : COP - B Com #1E

Project Number: COP - B Com #1E

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
H10060335001	**MW-1**	SW-846 3010A	DIGM/1829	SW-846 6010B	ICP/1467
H10060335002	**MW-6**	SW-846 3010A	DIGM/1829	SW-846 6010B	ICP/1467
H10060335001	**MW-1**	SW-846 5030	MSV/2070	SW-846 8260B	MSV/2071
H10060335002	**MW-6**	SW-846 5030	MSV/2070	SW-846 8260B	MSV/2071
H10060335003	**DUPLICATE**	SW-846 5030	MSV/2070	SW-846 8260B	MSV/2071
H10060335004	**TRIP BLANK**	SW-846 5030	MSV/2070	SW-846 8260B	MSV/2071

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

Sample Receipt Checklist

WorkOrder:	H10060335	Received By	LOG
Date and Time	06/15/2010 09:00	Carrier Name:	FEDEXS
Temperature:	3.0°C	Chilled By:	Water Ice

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

*VOA Preservation Checked After Sample Analysis

SPL Representative: Contact Date & Time:

Client Name Contacted:

Client Instructions:

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

SPL, Inc.
Analysis Request & Chain of Custody Record

H10060335

page 1 of 1

Client Name: ConocoPhillips/Tetra Tech
Address: 6121 Indian School Rd. Ste 200
City: Albuquerque State: NM Zip: 87110
Phone/Fax: (505) 237-8440
Client Contact: Kelly Blanchard Email: Kelly.Blanchard@Tetrat…
Project Name/No.: B Com #1E
Site Name:
Site Location: Farmington, NM
Invoice To: Ph:

Matrix: W=water S=soil O=oil A=air SL=sludge E=encore X=other
Bottle: P=plastic A=amber glass G=glass V=vial X=other
Size: 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz X=other
Pres.: 1=HCl 2=HNO3 3=H2SO4 X=other

SAMPLE ID	DATE	TIME	comp	grab	matrix	bottle	size	pres.	Number of Containers	Dissolved Fe	BTEX
MW-1	6/11/10	0755 0805		X	W	P	16	Ø	1	X	
MW-1	6/11/10	0755 0805		X	W	V	40	1	3		X
MW-6	6/11/10	0740		X	W	P	16	Ø	1	X	
MW-6	6/11/10	0740		X	W	V	40	1	3		X
Duplicate	6/11/10	0810		X	W	V	40	1	3		X
Trip Blank	6/14/10	1100			W	V	40	1	2		X

Client/Consultant Remarks: Please filter and preserve metals prior to Analysis
Laboratory remarks:
Intact? ☑ Y ☐ N
Ice? ☑ Y ☐ N
Temp: 3°C

Requested TAT
☐ 1 Business Day ☐ Contract
☐ 2 Business Days ☒ Standard
☐ 3 Business Days
☐ Other
Rush TAT requires prior notice

Special Reporting Requirements Results: Fax ☐ Email ☒ PDF ☒
Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐ TX TRRP ☐ LA RECAP ☐
Special Detection Limits (specify):
PM review (initial):

1. Relinquished by Sampler: Olga Baun date: 6/14/10 time: 1130 2. Received by:
3. Relinquished by: date: time: 4. Received by:
5. Relinquished by: date: 6/15/10 time: 900 6. Received by Laboratory: Amanda Nickerson

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

APPENDIX C

HISTORICAL ANALYTICAL DATA

Table 2
BTEX Ground Water Analytical Summary
Farmington B Com 1E
Unit O, Sec. 15 T29N, R13W

Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
			Benzene	Toluene	Ethylbenzene	Total-Xylene
9802020-01A	MW#1	On Site Lab.	210.0	34.0	370.0	2044.0
3" of free product	in the bailer					
Not Sampled	free product	in well				
9812053-04A			350.0	BDL	420	2800.0
Water	Samples	Taken	in	1999		
Not Sampled	free product	in well				
9802020-02A	MW#2	On Site Lab.	2.4	5.3	16.0	470.0
9806055-02A			0.8	2.7	32.0	171.0
9809035-01A			1.3	2.5	39.0	33.3
9812053-05A			BDL	0.6	2.1	35.0
9903012-05A			BDL	BDL	64	119.0
9906055-05A			BDL	BDL	BDL	BDL
9909054-05A			BDL	BDL	4.1	68.1
9912018-05A			BDL	BDL	1.8	36.4
0401011-004A		lina ba Lab	BDL	BDL	BDL	BDL
9802020-03A	MW#3	On Site Lab.	0.9	1.2	1.6	5.3
9806055-01A			BDL	BDL	0.5	2.0
9809035-02A			BDL	BDL	BDL	BDL
9812053-06A			BDL	BDL	BDL	BDL
9903012-04A			BDL	BDL	BDL	BDL
9906055-04A			BDL	0.9	3.1	56.0
9909054-04A			BDL	0.6	BDL	BDL
9912018-04A			BDL	BDL	BDL	BDL
0401011-002A		lina ba Lab	BDL	BDL	BDL	BDL
Action	Levels		10.0	750.0	750.0	620.0

Table 2
BTEX Ground Water Analytical Summary
Farmington B Com 1E
Unit O, Sec. 15 T29N, R13W

Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
9809035-03A	MW#4	On Site Lab.	BDL	BDL	BDL	BDL
9812053-03A			BDL	BDL	0.6	BDL
9903012-03A			BDL	BDL	BDL	BDL
9906055-03A			BDL	BDL	BDL	BDL
9909054-03A			BDL	BDL	BDL	BDL
9912018-03A			BDL	0.7	BDL	BDL
0003041-01A			BDL	BDL	BDL	BDL
0006009-02A			BDL	BDL	BDL	BDL
0009020*01A			BDL	BDL	BDL	BDL
0401011-003A		lina ba Lab	BDL	BDL	BDL	BDL
9809035-04A	MW#5	On Site Lab.	BDL	BDL	BDL	BDL
9812053-02A			BDL	BDL	BDL	BDL
9903012-02A			BDL	BDL	BDL	BDL
9906055-02A			BDL	BDL	BDL	BDL
9909054-02A			BDL	BDL	BDL	BDL
9912018-02A			BDL	0.8	BDL	BDL
0003041-02A			BDL	BDL	BDL	BDL
0006009-01A			BDL	BDL	BDL	BDL
9912018-05A			BDL	BDL	1.8	36.4
0401011-005A		lina ba Lab	BDL	BDL	BDL	BDL
9809035-05A	MW#6	On Site Lab.	BDL	BDL	BDL	BDL
9812053-01A			BDL	BDL	BDL	BDL
9903012-01A			BDL	BDL	BDL	BDL
9906055-01A			BDL	BDL	BDL	BDL
9909054-01A			BDL	0.7	1.1	BDL
9912018-01A			BDL	1.8	0.7	1.9
0401011-006A		lina ba Lab	BDL	BDL	BDL	BDL
Action	Levels		10.0	750.0	750.0	620.0

Table 2
BTEX Ground Water Analytical Summary
Farmington B Com 1E
Unit O, Sec. 15 T29N, R13W

Sample ID#	Monitor Well	Remarks	Anions ppm	Iron ppm	BOD	COD
	MW#1	lina ba Lab	Not Sampled			
0401011-004	MW#2		65.1	BDL		
0401011-002	MW#3		73.3	BDL		
0401011-003	MW#4		67.7	BDL		
0401011-005	MW#5		86.8	BDL		
0401011-006	MW#6		28.2	0.194		