AP - 54

QUARTERLY MONITORING REPORTS

2013

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ENVIRONMENTAL CONSULTING
ENGINEERING
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CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

August 7, 2013

Mr. Edward Hansen
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Plains Pipeline, L.P. Hobbs Junction Mainline (Plains SRS#2003-00017)
Second Quarter 2013 Summary
NMOCD Reference # AP-054
UL-M (SW¼ of the SW¼) of Section 26, T18S, R37E
Latitude: 32° 42' 40.85"N and Longitude: 103° 13' 42.01"W
Landowners: State of New Mexico and Ms. Faye Klein
Lea County, New Mexico

Dear Mr. Hansen:

Talon/LPE (Talon) is submitting this letter report on behalf of Plains Pipeline, L.P. (Plains), which summarizes the site activities that occurred during the second quarter of 2013.

Remediation Activities

During the second quarter of 2013, one (1) specific gravity skimmer with bladder pump was operating in monitoring well MW-16. In addition, sixteen (16) total fluids pumps were operating in monitoring wells MW-1 through MW-6, MW-10, MW-11, MW-12, MW-14, MW-15, MW-17, MW-20 and MW-25 through MW-27. The skimmer and total fluids pumps are utilized to recover phase separated hydrocarbons (PSH) and to inhibit the migration of the PSH and dissolved-phase plumes. The PSH recovery system is inspected and maintained a minimum of biweekly to optimize recovery rates.

During the second quarter, approximately 15,000 barrels of water was recovered by the system and was transferred by pump to Occidental Petroleum's North Hobbs Satellite facility for disposal. In addition, approximately 42 barrels of crude oil was recovered by the system during the quarter and approximately 25 barrels of crude oil was inadvertently removed from the recovery tank and was transferred by pump to Occidental Petroleum's North Hobbs Satellite facility. There was approximately 55 barrels of crude oil contained in the recovery tank at the end of the quarter.

Quarterly Sampling Event

On June 6, 2013, the second quarter groundwater sampling event was conducted at the site. Prior to sample collection, the depths to static water levels and to PSH, if present, were measured in all monitor wells using an interface probe. Following a sufficient purge, groundwater samples from nine (9) monitor wells (MW-7, MW-9, MW-13, MW-18, MW-19, MW-21, MW-22, MW-23, and MW-24 were collected and submitted to the laboratory for quantification of

benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA SW-846 Method 8021B.

Groundwater samples were not collected from eighteen (18) monitor wells that were impacted with PSH (MW-1 through MW-6, MW-8, MW-10, MW-11, MW-12, MW-14, MW-15, MW-16, MW-17, MW-20, MW-25, MW-26, and MW-27).

Groundwater Monitoring Event Results

Data collected from the September groundwater monitoring event exhibited the following results:

- Benzene concentrations ranged from <0.00100 mg/L to 14.0 mg/L. Benzene concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) remediation threshold of 0.010 mg/L in groundwater samples collected from monitor wells MW-19, MW-21, and MW-22.
- Toluene concentrations ranged from <0.00100 mg/L to 0.762 mg/L. Toluene concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) remediation threshold of 0.750 mg/L in groundwater samples collected from monitor well MW-19.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 1.05 mg/L. The ethylbenzene concentration exceeded the NMWQCC remediation threshold of 0.750 mg/L in the groundwater sample collected from monitor well MW-21.
- Total Xylene concentrations ranged from <0.00100 mg/L to 0.461 mg/L. The total Xylene concentration did not exceed the NMWQCC remediation threshold of 0.620 mg/L in any of the groundwater samples collected.
- Compared to the first quarter of 2013 analytical results, dissolved-phase concentrations remained stable.
- Compared to the first quarter 2013, groundwater gauging data indicated a increase in groundwater levels by an average of 0.06 feet. The groundwater flow direction is to the east-southeast at a gradient of 0.0042 foot per foot and the average depth to groundwater at the site is approximately 40 feet.
- PSH thicknesses have typically fluctuated from quarter to quarter but have declined overall since PSH recovery operations were initiated. Currently, PSH thicknesses range from 0.15 foot to 6.05 feet.
- Based on the data collected during the second quarter 2013 groundwater monitoring event, both the PSH and dissolved-phase plumes are delineated.

Groundwater elevations and PSH thicknesses are summarized in Table 1, Appendix B, and groundwater analytical results are summarized in Table 2, Appendix B. The second quarter laboratory analytical report and chain of custody documentation are provided in Appendix C. The second quarter site map, gradient and PSH thickness and groundwater dissolved-phase concentration map are located in Appendix A.

Recommendations

- The recovery system is currently performing its tasks of recovering PSH and impeding movement of the dissolved-phase plume. Talon LPE offers no recommendations for the site.

If you have any questions or require further information, please contact me at (940) 329-0691 or Mr. Jeffrey Dann at (713) 646-4657.

Sincerely,

Brad Ivy

Project Manager

Cc: Mr. Jeffrey P. Dann, Plains Pipeline, L.P.

Appendices:

Appendix A ..... Figures

Appendix B ..... Tables

Appendix C ..... Laboratory Analytical Data Reports and Chain of Custody Documentation

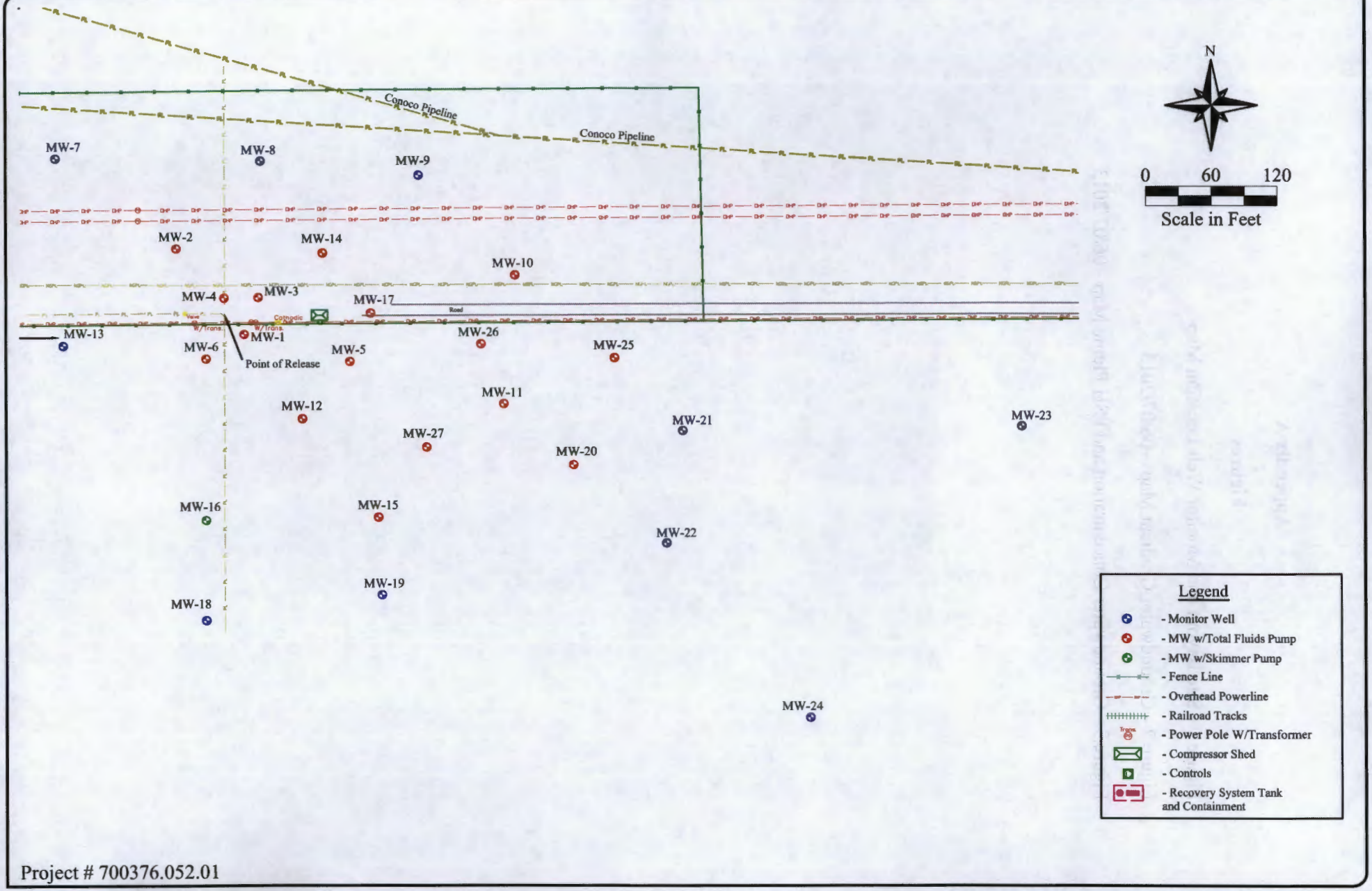
Appendix A

Figures

Figure 1 - Site Layout and Monitor Well Location Map

Figure 2 - Groundwater Gradient Map – 06/07/2013

Figure 3 - Groundwater Concentration and PSH Plume Map - 06/07/2013



Project # 700376.052.01

TALON LPE

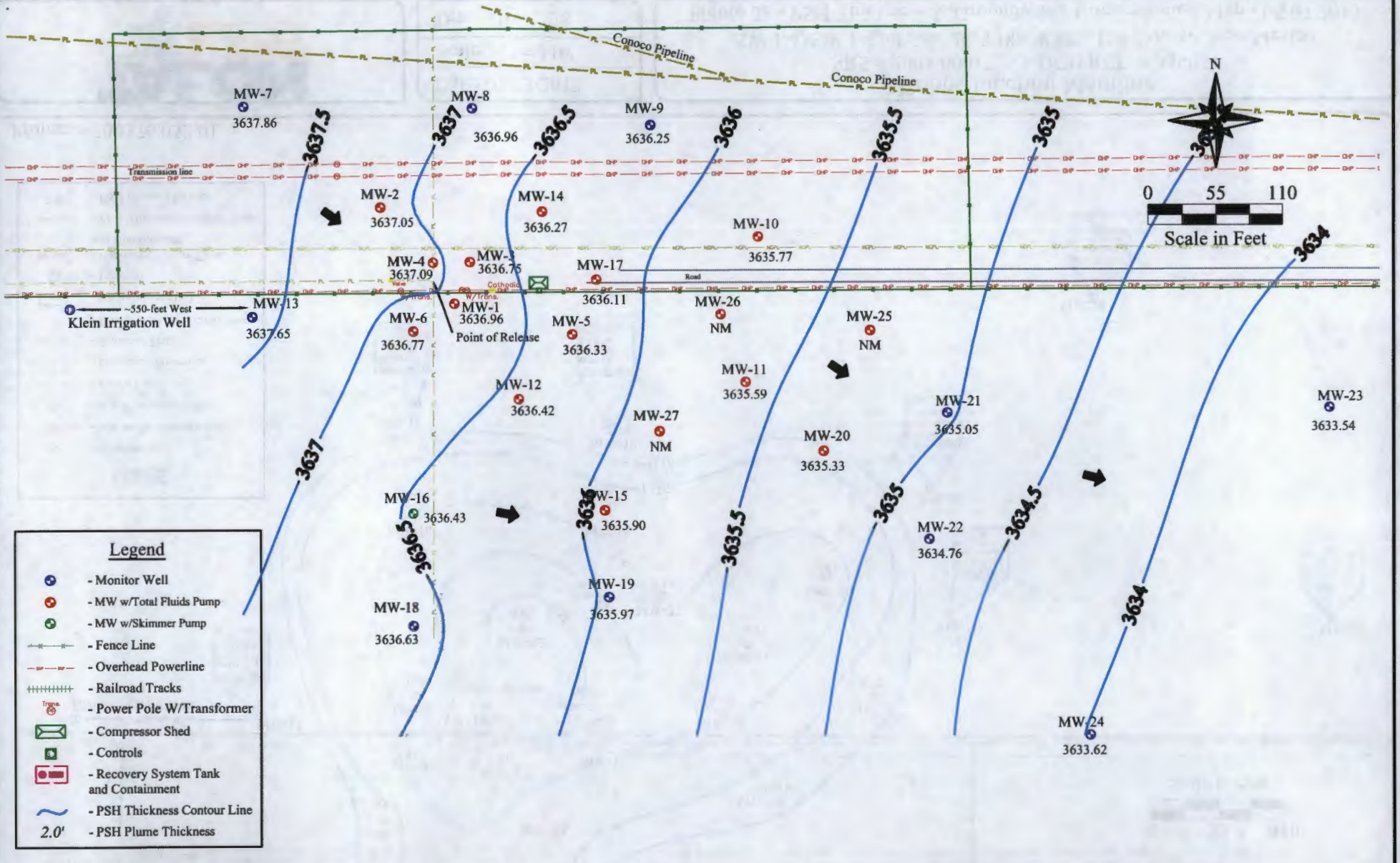
Date:	09/16/2013
Scale:	1" = 120'
Drawn By:	TJS

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054

SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico

Figure 1 - Site Map, (9-16-13)



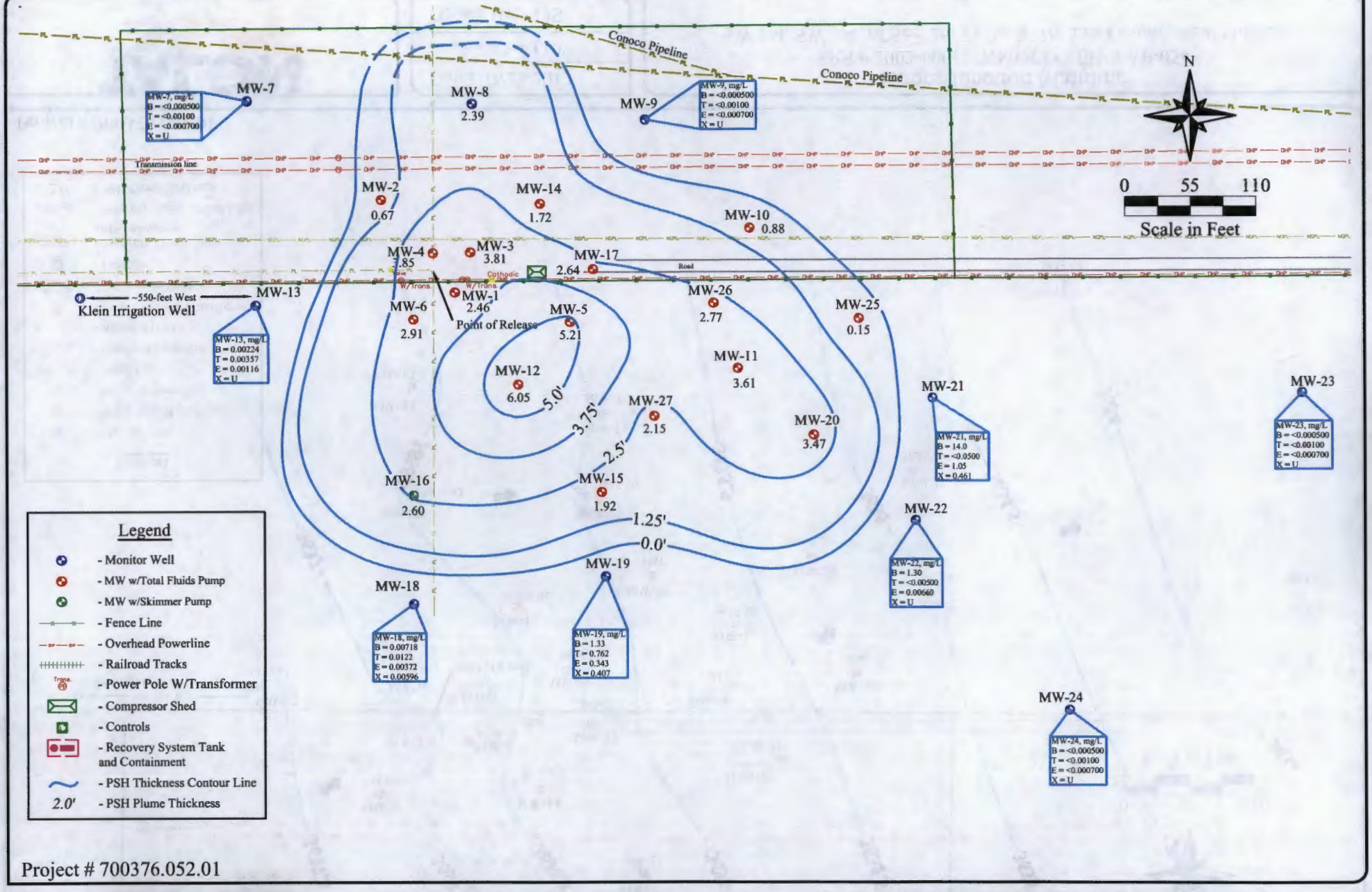
Project # 700376.052.01

TALON LPE

Date: 07/23/2013
Scale: 1" = 110'
Drawn By: TJS

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico



Project # 700376.052.01

TALON LPE

Date: 07/23/2013
Scale: 1" = 110'
Drawn By: TJS

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 3a - PSH Thickness & Groundwater Concentration Map - 06/07/2013

Appendix B

Tables

Table 1 - Summary of Historical Fluid Level Measurements

Table 2 - Summary of BTEX Groundwater Analytical Data

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"All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-1			Diameter: 4 in.	Screened Interval: 39 ft. to 54 ft.		TD: 54.2 ft.
	12/20/11	3678.50	43.42	40.51	2.91	3637.51
	03/09/12	3678.50	43.87	40.45	3.42	3637.49
	06/27/12	3678.50	45.23	40.64	4.59	3637.10
	09/18/12	3678.50	44.50	40.92	3.58	3636.99
	12/18/12	3678.50	43.02	41.50	1.52	3636.75
	03/15/13	3678.50	42.42	41.44	0.98	3636.90
	06/07/13	3678.50	43.59	41.13	2.46	3636.96
MW-2			Diameter: 4 in.	Screened Interval: 38 ft. to 53 ft.		TD: 53.4 ft.
	12/20/11	3679.47	43.65	41.20	2.45	3637.87
	03/09/12	3679.47	44.57	40.99	3.58	3637.89
	06/27/12	3679.47	43.30	41.76	1.54	3637.46
	09/18/12	3679.47	43.41	41.86	1.55	3637.35
	12/18/12	3679.47	43.90	41.93	1.97	3637.21
	03/15/13	3679.47	42.52	42.07	0.45	3637.33
	06/07/13	3679.47	42.98	42.31	0.67	3637.05
MW-3			Diameter: 4 in.	Screened Interval: 39 ft. to 54 ft.		TD: 54.7 ft.
	12/20/11	3679.81	45.40	41.92	3.48	3637.32
	03/09/12	3679.81	45.95	41.60	4.35	3637.49
	06/27/12	3679.81	46.55	41.94	4.61	3637.11
	09/18/12	3679.81	46.72	42.05	4.67	3636.99
	12/18/12	3679.81	45.96	42.40	3.56	3636.82
	03/15/13	3679.81	43.71	42.78	0.93	3636.88
	06/07/13	3679.81	46.24	42.43	3.81	3636.75
MW-4			Diameter: 4 in.	Screened Interval: 39 ft. to 54 ft.		TD: 54.6 ft.
	12/20/11	3679.64	44.30	41.60	2.70	3637.59
	03/09/12	3679.64	44.88	41.41	3.47	3637.66
	06/27/12	3679.64	45.50	41.80	3.70	3637.23
	09/18/12	3679.64	45.89	41.83	4.06	3637.14
	12/18/12	3679.64	45.54	42.08	3.46	3636.99
	03/15/13	3679.64	44.17	42.24	1.93	3637.08
	06/07/13	3679.64	45.76	41.91	3.85	3637.09
MW-5			Diameter: 4 in.	Screened Interval: 40 ft. to 55 ft.		TD: 55 ft.
	12/20/11	3679.26	46.13	41.86	4.27	3636.70
	03/09/12	3679.26	45.71	41.62	4.09	3636.97
	06/27/12	3679.26	47.13	41.75	5.38	3636.62
	09/18/12	3679.26	46.51	42.00	4.51	3636.52
	12/18/12	3679.26	46.83	42.22	4.61	3636.28
	03/15/13	3679.26	44.65	42.58	2.07	3636.34
	06/07/13	3679.26	47.28	42.07	5.21	3636.33
MW-6			Diameter: 4 in.	Screened Interval: 40 ft. to 55 ft.		TD: 55 ft.
	12/20/11	3680.63	46.02	42.44	3.58	3637.60
	03/09/12	3680.63	45.97	42.44	3.53	3637.61
	06/27/12	3680.63	47.08	42.70	4.38	3637.21
	09/18/12	3680.63	46.57	42.95	3.62	3637.08
	12/18/12	3680.63	44.70	43.65	1.05	3636.81
	03/15/13	3680.63	44.56	43.45	1.11	3637.00
	06/07/13	3680.63	46.29	43.38	2.91	3636.77
MW-7			Diameter: 2 in.	Screened Interval: 38 ft. to 53 ft.		TD: 53 ft.
	12/20/11	3679.85	41.40	-	-	3638.45
	03/09/12	3679.85	41.42	-	-	3638.43
	06/27/12	3679.85	41.68	-	-	3638.17
	09/18/12	3679.85	42.00	-	-	3637.85
	12/18/12	3679.85	42.14	-	-	3637.71
	03/15/13	3679.85	41.90	-	-	3637.95
	06/07/13	3679.85	41.99	-	-	3637.86

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"All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-8			Diameter: 2 in.	Screened Interval:	35 ft. to 50 ft.	TD: 50 ft.
	12/20/11	3679.07	42.11	41.41	0.70	3637.54
	03/09/12	3679.07	42.50	41.35	1.15	3637.53
	06/27/12	3679.07	43.40	41.68	1.72	3637.11
	09/18/12	3679.07	43.91	41.70	2.21	3637.01
	12/18/12	3679.07	44.02	41.83	2.19	3636.88
	03/15/13	3679.07	44.16	41.62	2.54	3637.03
	06/07/13	3679.07	44.11	41.72	2.39	3636.96
MW-9			Diameter: 2 in.	Screened Interval:	37 ft. to 52 ft.	TD: 52 ft.
	12/20/11	3678.76	41.95	-	-	3636.81
	03/09/12	3678.76	41.96	-	-	3636.80
	06/27/12	3678.76	42.33	-	-	3636.43
	09/18/12	3678.76	43.43	-	-	3635.33
	12/18/12	3678.76	42.81	-	-	3635.95
	03/15/13	3678.76	42.51	-	-	3636.25
	06/07/13	3678.76	42.51	-	-	3636.25
MW-10			Diameter: 2 in.	Screened Interval:	37 ft. to 52 ft.	TD: 52 ft.
	12/20/11	3678.36	43.15	41.82	1.33	3636.32
	03/09/12	3678.36	43.22	41.84	1.38	3636.29
	06/27/12	3678.36	43.00	42.30	0.70	3635.94
	09/18/12	3678.36	44.35	42.19	2.16	3635.81
	12/18/12	3678.36	42.87	42.70	0.17	3635.63
	03/15/13	3678.36	42.74	42.62	0.12	3635.72
	06/07/13	3678.36	43.32	42.44	0.88	3635.77
MW-11			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	12/20/11	3678.03	44.44	41.43	3.01	3636.10
	03/09/12	3678.03	44.00	41.56	2.44	3636.07
	06/27/12	3678.03	44.86	41.70	3.16	3635.81
	09/18/12	3678.03	44.40	41.99	2.41	3635.64
	12/18/12	3678.03	45.34	42.05	3.29	3635.44
	03/15/13	3678.03	43.11	42.40	0.71	3635.51
	06/07/13	3678.03	45.45	41.84	3.61	3635.59
MW-12			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	12/20/11	3679.63	47.52	41.78	5.74	3636.90
	03/09/12	3679.63	45.75	41.90	3.85	3637.09
	06/27/12	3679.63	47.60	41.95	5.65	3636.75
	09/18/12	3679.63	46.56	42.36	4.20	3636.58
	12/18/12	3679.63	47.52	42.35	5.17	3636.43
	03/15/13	3679.63	47.20	42.45	4.75	3636.40
	06/07/13	3679.63	48.26	42.21	6.05	3636.42
MW-13			Diameter: 2 in.	Screened Interval:	ft. to ft.	TD: 51.3 ft.
	12/20/11	3681.42	43.17	-	-	3638.25
	03/09/12	3681.42	43.18	-	-	3638.24
	06/27/12	3681.42	43.68	-	-	3637.74
	09/18/12	3681.42	43.75	-	-	3637.67
	12/18/12	3681.42	43.92	-	-	3637.50
	03/15/13	3681.42	43.40	-	-	3638.02
	06/07/13	3681.42	43.77	-	-	3637.65
MW-14			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	12/20/11	3679.00	46.12	41.55	4.57	3636.70
	03/09/12	3679.00	45.50	41.31	4.19	3637.00
	06/27/12	3679.00	46.65	41.53	5.12	3636.63
	09/18/12	3679.00	46.60	41.69	4.91	3636.50
	12/18/12	3679.00	44.80	42.33	2.47	3636.26
	03/15/13	3679.00	43.18	42.58	0.60	3636.32
	06/07/13	3679.00	44.17	42.45	1.72	3636.27

TALON
"All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-15			Diameter: 4 in.	Screened Interval:	34 ft. to 49 ft.	TD: 49.0 ft.
	12/20/11	3674.92	41.63	38.39	3.24	3636.00
	03/09/12	3674.92	41.25	37.97	3.28	3636.41
	06/27/12	3674.92	42.20	38.22	3.98	3636.04
	09/18/12	3674.92	41.38	38.49	2.89	3635.95
	12/18/12	3674.92	41.03	38.81	2.22	3635.74
	03/15/13	3674.92	39.88	38.90	0.98	3635.86
	06/07/13	3674.92	40.62	38.70	1.92	3635.90
MW-16			Diameter: 4 in.	Screened Interval:	33 ft. to 48 ft.	TD: 48 ft.
	12/20/11	3676.86	41.46	40.18	1.28	3636.47
	03/09/12	3676.86	40.32	39.72	0.60	3637.04
	06/27/12	3676.86	40.85	40.05	0.80	3636.68
	09/18/12	3676.86	40.90	40.16	0.74	3636.58
	12/18/12	3676.86	41.42	40.26	1.16	3636.41
	03/15/13	3676.86	41.61	40.05	1.56	3636.55
	06/07/13	3676.86	42.60	40.00	2.60	3636.43
MW-17			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	12/20/11	3679.01	47.11	42.23	4.88	3635.97
	03/09/12	3679.01	46.31	41.51	4.80	3636.71
	06/27/12	3679.01	46.80	41.84	4.96	3636.35
	09/18/12	3679.01	45.15	42.37	2.78	3636.18
	12/18/12	3679.01	45.95	42.40	3.55	3636.02
	03/15/13	3679.01	43.95	42.81	1.14	3636.01
	06/07/13	3679.01	45.10	42.46	2.64	3636.11
MW-18			Diameter: 2 in.	Screened Interval:	30 ft. to 45 ft.	TD: 45 ft.
	12/20/11	3675.68	38.51	-	-	3637.17
	03/09/12	3675.68	38.53	-	-	3637.15
	06/27/12	3675.68	38.91	-	-	3636.77
	09/18/12	3675.68	39.03	-	-	3636.65
	12/18/12	3675.68	39.23	-	-	3636.45
	03/15/13	3675.68	38.97	-	-	3636.71
	06/07/13	3675.68	39.05	-	-	3636.63
MW-19			Diameter: 2 in.	Screened Interval:	31 ft. to 46 ft.	TD: 46 ft.
	12/20/11	3674.96	38.44	-	-	3636.52
	03/09/12	3674.96	38.47	-	-	3636.49
	06/27/12	3674.96	38.48	-	-	3636.48
	09/18/12	3674.96	38.92	-	-	3636.04
	12/18/12	3674.96	39.12	-	-	3635.84
	03/15/13	3674.96	38.94	-	-	3636.02
	06/07/13	3674.96	38.99	-	-	3635.97
MW-20			Diameter: 2 in.	Screened Interval:	31 ft. to 46 ft.	TD: 46 ft.
	12/20/11	3674.38	40.59	38.27	2.32	3635.73
	03/09/12	3674.38	40.35	38.20	2.15	3635.83
	06/27/12	3674.38	41.25	38.38	2.87	3635.53
	09/18/12	3674.38	41.00	38.58	2.42	3635.40
	12/18/12	3674.38	40.05	39.02	1.03	3635.19
	03/15/13	3674.38	41.92	38.50	3.42	3635.32
	06/07/13	3674.38	41.95	38.48	3.47	3635.33
MW-21			Diameter: 2 in.	Screened Interval:	23 ft. to 53 ft.	TD: 53.0 ft.
	12/20/11	3674.38	38.80	-	-	3635.58
	03/09/12	3674.38	38.87	-	-	3635.51
	06/27/12	3674.38	39.15	-	-	3635.23
	09/18/12	3674.38	39.27	-	-	3635.11
	12/18/12	3674.38	38.64	-	-	3635.74
	03/15/13	3674.38	39.32	-	-	3635.06
	06/07/13	3674.38	39.33	-	-	3635.05

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"All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-22			Diameter: 2 in.	Screened Interval: 20 ft. to 50 ft.		TD: 50 ft.
	12/20/11	3674.07	38.60	-	-	3635.47
	03/09/12	3674.07	38.64	-	-	3635.43
	06/27/12	3674.07	38.94	-	-	3635.13
	09/18/12	3674.07	39.07	-	-	3635.00
	12/18/12	3674.07	39.28	-	-	3634.79
	03/15/13	3674.07	39.11	-	-	3634.96
	06/07/13	3674.07	39.31	-	-	3634.76
MW-23			Diameter: 2 in.	Screened Interval: 29 ft. to 49 ft.		TD: 49 ft.
	12/20/11	3672.39	38.40	-	-	3633.99
	03/09/12	3672.39	39.65	-	-	3632.74
	06/27/12	3672.39	38.68	-	-	3633.71
	09/18/12	3672.39	38.82	-	-	3633.57
	12/18/12	3672.39	39.02	-	-	3633.37
	03/15/13	3672.39	38.77	-	-	3633.62
	06/07/13	3672.39	38.85	-	-	3633.54
MW-24			Diameter: 2 in.	Screened Interval: 30 ft. to 50 ft.		TD: 50 ft.
	12/20/11	3672.79	38.28	-	-	3634.51
	03/09/12	3672.79	39.48	-	-	3633.31
	06/27/12	3672.79	38.58	-	-	3634.21
	09/18/12	3672.79	38.78	-	-	3634.01
	12/18/12	3672.79	38.93	-	-	3633.86
	03/15/13	3672.79	38.67	-	-	3634.12
	06/07/13	3672.79	38.81	-	-	3633.98
MW-25			Diameter: in.	Screened Interval: ft. to ft.		TD: ft.
	12/20/11		40.20	40.20	0.00	
	03/09/12		40.73	40.73	0.00	
	06/27/12		41.20	41.18	0.02	
	09/18/12		41.33	41.32	0.01	
	12/18/12		41.41	41.40	0.01	
	03/15/13		41.31	-	-	
	06/07/13		41.65	41.50	0.15	
MW-26			Diameter: in.	Screened Interval: ft. to ft.		TD: ft.
	12/20/11		40.70	40.70	0.00	
	03/09/12		41.05	40.70	0.35	
	06/27/12		43.90	40.50	3.40	
	09/18/12		44.28	40.55	3.73	
	12/18/12		43.41	41.41	2.00	
	03/15/13		42.98	41.00	1.98	
	06/07/13		43.54	40.77	2.77	
MW-27			Diameter: in.	Screened Interval: ft. to ft.		TD: ft.
	12/20/11		38.60	38.44	0.16	
	03/09/12		41.50	37.85	3.65	
	06/27/12		41.97	38.15	3.82	
	09/18/12		41.44	38.41	3.03	
	12/18/12		41.37	38.71	2.66	
	03/15/13		40.21	38.80	1.41	
	06/07/13		40.77	38.62	2.15	

TALON
"All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)

Specific Gravity: 0.835

NG - Not Gauged
NSch - Not scheduled to be gauged
Block - Well blocked/obstructed
Locate - Can not locate/find well
Dry - Well is dry
P&A - Plug and Abandon
WD - Well Destroyed

TALON
"All the Pieces"

Summary of Historical Groundwater Analytical Data
Hobbs Junction Main Line
SRS #: 2003-0017

Sample Designation	Date Sampled	Concentration (mg/L)				
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX
MW-7	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
	06/07/13	<0.000500	<0.00100	<0.000700	U	U
MW-9	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
	06/07/13	<0.000500	<0.00100	<0.000700	U	U
MW-13	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
	06/07/13	0.00224	0.00357	0.00116	U	0.00697
MW-18	03/09/12	BRL	BRL	BRL	BRL	BRL
	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
	06/07/13	0.00718	0.0122	0.00372	0.00596	0.0291
MW-19	03/09/12	6.33	BRL	0.470	0.102	6.90
	06/28/12	0.491	<0.0174	0.250	BRL	-
	09/18/12	0.204	0.0607	0.0989	0.0427	-
	12/18/12	0.146	0.0720	0.0716	0.0363	-
	03/18/13	0.783	0.351	0.232	0.206	-
	06/07/13	1.33	0.762	0.343	0.407	2.84
MW-21	03/09/12	0.437	BRL	0.323	0.0207	0.786
	06/28/12	4.84	<0.0347	0.257	BRL	-
	09/18/12	9.17	<0.0174	0.694	0.298	-
	12/18/12	7.82	<0.0174	0.563	0.247	-
	03/18/13	13.7	<0.0259	0.969	0.448	-
	06/07/13	14.0	<0.0500	1.05	0.461	15.5

TALON
"All the Pieces"

Summary of Historical Groundwater Analytical Data
Hobbs Junction Main Line
SRS #: 2003-0017

Sample Designation	Date Sampled	Concentration (mg/L)				
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX
MW-22	03/09/12	4.38	BRL	0.307	BRL	4.69
	06/28/12	2.27	<0.0347	<0.0326	BRL	-
	09/18/12	0.972	<0.00130	0.0442	BRL	-
	12/18/12	1.76	<0.00347	0.0278	BRL	-
	03/18/13	1.04	<0.00518	<0.00518	BRL	-
	06/07/13	1.30	<0.00500	0.00660	U	1.31
MW-23	03/09/12	BRL	BRL	BRL	BRL	BRL
	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000310	<0.000259	<0.000291	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
	06/07/13	<0.000500	<0.00100	<0.000700	U	U
MW-24	03/09/12	BRL	BRL	BRL	BRL	BRL
	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
	06/07/13	<0.000500	<0.00100	<0.000700	U	U
MW-25	03/18/13	2.18	0.582	0.182	0.228	-

Appendix C

Laboratory Analytical Data Reports and Chain of Custody Documentation

Analytical Report 464816

for

PLAINS ALL AMERICAN EH&S

Project Manager: Brad Ivy

Hobbs Jct.Mainline

700376.052.05

13-JUN-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

13-JUN-13

Project Manager: **Brad Ivy**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No(s): **464816**
Hobbs Jct.Mainline
Project Address: Lea County, NM

Brad Ivy:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 464816. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 464816 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-7	W	06-07-13 10:00		464816-001
MW-9	W	06-07-13 09:30		464816-002
MW-13	W	06-07-13 13:00		464816-003
MW-18	W	06-07-13 14:30		464816-004
MW-19	W	06-07-13 15:00		464816-005
MW-21	W	06-07-13 16:30		464816-006
MW-22	W	06-07-13 15:45		464816-007
MW-23	W	06-07-13 16:45		464816-008
MW-24	W	06-07-13 16:15		464816-009

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Hobbs Jct.Mainline

Project ID: *700376.052.05*
Work Order Number(s): *464816*

Report Date: *13-JUN-13*
Date Received: *06/07/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

XENCO Laboratories

Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id: **MW-7** Matrix: Water Date Received:06.07.13 17.30

Lab Sample Id: 464816-001 Date Collected: 06.07.13 10.00

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: DYV % Moisture:

Analyst: DYV Date Prep: 06.12.13 08.00

Seq Number: 916109

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	06.13.13 14.28	U	1
Toluene	108-88-3	ND	0.00200	mg/L	06.13.13 14.28	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	06.13.13 14.28	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	06.13.13 14.28	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	06.13.13 14.28	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	06.13.13 14.28	U	1
Total BTEX		ND	0.00100	mg/L	06.13.13 14.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	80-120	06.13.13 14.28	
4-Bromofluorobenzene	460-00-4	82	%	80-120	06.13.13 14.28	

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Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id: **MW-9** Matrix: Water Date Received:06.07.13 17.30

Lab Sample Id: 464816-002 Date Collected: 06.07.13 09.30

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

Tech: DYV % Moisture:

Analyst: DYV Date Prep: 06.12.13 08.00

Seq Number: 916109

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	06.12.13 14.46	U	1
Toluene	108-88-3	ND	0.00200	mg/L	06.12.13 14.46	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	06.12.13 14.46	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	06.12.13 14.46	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	06.12.13 14.46	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	06.12.13 14.46	U	1
Total BTEX		ND	0.00100	mg/L	06.12.13 14.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	80-120	06.12.13 14.46	
4-Bromofluorobenzene	460-00-4	83	%	80-120	06.12.13 14.46	

Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id: **MW-13**	Matrix: Water	Date Received:06.07.13 17.30	
Lab Sample Id: 464816-003	Date Collected: 06.07.13 13.00		
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B	
Tech: DYV		% Moisture:	
Analyst: DYV	Date Prep: 06.12.13 08.00		
Seq Number: 916109			

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00224**	0.00100	mg/L	06.12.13 15.02		1
Toluene	108-88-3	**0.00357**	0.00200	mg/L	06.12.13 15.02		1
Ethylbenzene	100-41-4	**0.00116**	0.00100	mg/L	06.12.13 15.02		1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	06.12.13 15.02	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	06.12.13 15.02	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	06.12.13 15.02	U	1
Total BTEX		**0.00697**	0.00100	mg/L	06.12.13 15.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	80-120	06.12.13 15.02	
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.12.13 15.02	

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Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id:	**MW-18**	Matrix: Water	Date Received:06.07.13 17.30
Lab Sample Id:	464816-004	Date Collected: 06.07.13 14.30	
Analytical Method:	BTEX by EPA 8021B		Prep Method: SW5030B
Tech:	DYV		% Moisture:
Analyst:	DYV	Date Prep: 06.12.13 08.00	
Seq Number:	916109		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00718**	0.00100	mg/L	06.12.13 15.19		1
Toluene	108-88-3	**0.0122**	0.00200	mg/L	06.12.13 15.19		1
Ethylbenzene	100-41-4	**0.00372**	0.00100	mg/L	06.12.13 15.19		1
m,p-Xylenes	179601-23-1	**0.00419**	0.00200	mg/L	06.12.13 15.19		1
o-Xylene	95-47-6	**0.00177**	0.00100	mg/L	06.12.13 15.19		1
Total Xylenes	1330-20-7	**0.00596**	0.00100	mg/L	06.12.13 15.19		1
Total BTEX		**0.0291**	0.00100	mg/L	06.12.13 15.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	80-120	06.12.13 15.19	
4-Bromofluorobenzene	460-00-4	93	%	80-120	06.12.13 15.19	

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Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id:	**MW-19**	Matrix: Water	Date Received:06.07.13 17.30
Lab Sample Id:	464816-005	Date Collected: 06.07.13 15.00	
Analytical Method:	BTEX by EPA 8021B		Prep Method: SW5030B
Tech:	DYV		% Moisture:
Analyst:	DYV	Date Prep: 06.12.13 08.00	
Seq Number:	916109		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**1.33**	0.00500	mg/L	06.13.13 14.12		5
Toluene	108-88-3	**0.762**	0.0100	mg/L	06.13.13 14.12		5
Ethylbenzene	100-41-4	**0.343**	0.00500	mg/L	06.13.13 14.12		5
m,p-Xylenes	179601-23-1	**0.232**	0.0100	mg/L	06.13.13 14.12		5
o-Xylene	95-47-6	**0.175**	0.00500	mg/L	06.13.13 14.12		5
Total Xylenes	1330-20-7	**0.407**	0.00500	mg/L	06.13.13 14.12		5
Total BTEX		**2.84**	0.00500	mg/L	06.13.13 14.12		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	80-120	06.13.13 14.12	
4-Bromofluorobenzene	460-00-4	104	%	80-120	06.13.13 14.12	

XENCO Laboratories

Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id: **MW-21**	Matrix: Water	Date Received:06.07.13 17.30	
Lab Sample Id: 464816-006	Date Collected: 06.07.13 16.30		
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B	
Tech: DYV		% Moisture:	
Analyst: DYV	Date Prep: 06.12.13 17.00		
Seq Number: 916137			

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**14.0**	0.0500	mg/L	06.13.13 16.30		50
Toluene	108-88-3	ND	0.100	mg/L	06.13.13 16.30	U	50
Ethylbenzene	100-41-4	**1.05**	0.0500	mg/L	06.13.13 16.30		50
m,p-Xylenes	179601-23-1	**0.283**	0.100	mg/L	06.13.13 16.30		50
o-Xylene	95-47-6	**0.178**	0.0500	mg/L	06.13.13 16.30		50
Total Xylenes	1330-20-7	**0.461**	0.0500	mg/L	06.13.13 16.30		50
Total BTEX		**15.5**	0.0500	mg/L	06.13.13 16.30		50

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	80	%	80-120	06.13.13 16.30	
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.13.13 16.30	

Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id: **MW-22**	Matrix: Water	Date Received:06.07.13 17.30
Lab Sample Id: 464816-007	Date Collected: 06.07.13 15.45	
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B
Tech: DYV		% Moisture:
Analyst: DYV	Date Prep: 06.12.13 17.00	
Seq Number: 916137		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**1.30**	0.00500	mg/L	06.13.13 16.14		5
Toluene	108-88-3	ND	0.0100	mg/L	06.13.13 16.14	U	5
Ethylbenzene	100-41-4	**0.00660**	0.00500	mg/L	06.13.13 16.14		5
m,p-Xylenes	179601-23-1	ND	0.0100	mg/L	06.13.13 16.14	U	5
o-Xylene	95-47-6	ND	0.00500	mg/L	06.13.13 16.14	U	5
Total Xylenes	1330-20-7	ND	0.00500	mg/L	06.13.13 16.14	U	5
Total BTEX		**1.31**	0.00500	mg/L	06.13.13 16.14		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	80-120	06.13.13 16.14	
4-Bromofluorobenzene	460-00-4	91	%	80-120	06.13.13 16.14	

XENCO Laboratories

Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id: **MW-23**	Matrix: Water	Date Received:06.07.13 17.30	
Lab Sample Id: 464816-008	Date Collected: 06.07.13 16.45		
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B	
Tech: DYV		% Moisture:	
Analyst: DYV	Date Prep: 06.12.13 17.00		
Seq Number: 916137			

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	06.13.13 15.58	U	1
Toluene	108-88-3	ND	0.00200	mg/L	06.13.13 15.58	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	06.13.13 15.58	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	06.13.13 15.58	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	06.13.13 15.58	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	06.13.13 15.58	U	1
Total BTEX		ND	0.00100	mg/L	06.13.13 15.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	80-120	06.13.13 15.58	
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.13.13 15.58	

XENCO Laboratories

Certificate of Analytical Results 464816

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Jct.Mainline

Sample Id: **MW-24**	Matrix: Water	Date Received:06.07.13 17.30
Lab Sample Id: 464816-009	Date Collected: 06.07.13 16.15	
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B
Tech: DYV		% Moisture:
Analyst: DYV	Date Prep: 06.12.13 17.00	
Seq Number: 916137		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	06.13.13 15.41	U	1
Toluene	108-88-3	ND	0.00200	mg/L	06.13.13 15.41	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	06.13.13 15.41	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	06.13.13 15.41	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	06.13.13 15.41	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	06.13.13 15.41	U	1
Total BTEX		ND	0.00100	mg/L	06.13.13 15.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	80-120	06.13.13 15.41	
4-Bromofluorobenzene	460-00-4	94	%	80-120	06.13.13 15.41	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

PLAINS ALL AMERICAN EH&S

Hobbs Jct.Mainline

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 916109 — Matrix: Water — Date Prep: 06.12.13
MB Sample Id: 639605-1-BLK — LCS Sample Id: 639605-1-BKS — LCSD Sample Id: 639605-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0910	91	0.0904	90	70-125	1	25	mg/L	06.12.13 08:21	
Toluene	<0.00200	0.100	0.0862	86	0.0891	89	70-125	3	25	mg/L	06.12.13 08:21	
Ethylbenzene	<0.00100	0.100	0.0902	90	0.0960	96	71-129	6	25	mg/L	06.12.13 08:21	
m,p-Xylenes	<0.00200	0.200	0.182	91	0.195	98	70-131	7	25	mg/L	06.12.13 08:21	
o-Xylene	<0.00100	0.100	0.0937	94	0.101	101	71-133	7	25	mg/L	06.12.13 08:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		104		107		80-120	%	06.12.13 08:21
4-Bromofluorobenzene	86		103		116		80-120	%	06.12.13 08:21

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 916137 — Matrix: Water — Date Prep: 06.12.13
MB Sample Id: 639606-1-BLK — LCS Sample Id: 639606-1-BKS — LCSD Sample Id: 639606-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0880	88	0.0919	92	70-125	4	25	mg/L	06.12.13 20:12	
Toluene	<0.00200	0.100	0.0832	83	0.0857	86	70-125	3	25	mg/L	06.12.13 20:12	
Ethylbenzene	<0.00100	0.100	0.0877	88	0.0890	89	71-129	1	25	mg/L	06.12.13 20:12	
m,p-Xylenes	<0.00200	0.200	0.177	89	0.178	89	70-131	1	25	mg/L	06.12.13 20:12	
o-Xylene	<0.00100	0.100	0.0917	92	0.0929	93	71-133	1	25	mg/L	06.12.13 20:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		106		80-120	%	06.12.13 20:12
4-Bromofluorobenzene	80		94		99		80-120	%	06.12.13 20:12

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 916109 — Matrix: Water — Date Prep: 06.12.13
Parent Sample Id: 464816-001 — MS Sample Id: 464816-001 S — MSD Sample Id: 464816-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0921	92	0.0898	90	70-125	3	25	mg/L	06.12.13 13:42	
Toluene	<0.00200	0.100	0.0853	85	0.0850	85	70-125	0	25	mg/L	06.12.13 13:42	
Ethylbenzene	<0.00100	0.100	0.0880	88	0.0887	89	71-129	1	25	mg/L	06.12.13 13:42	
m,p-Xylenes	<0.00200	0.200	0.176	88	0.178	89	70-131	1	25	mg/L	06.12.13 13:42	
o-Xylene	<0.00100	0.100	0.0906	91	0.0916	92	71-133	1	25	mg/L	06.12.13 13:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		101		80-120	%	06.12.13 13:42
4-Bromofluorobenzene	90		98		80-120	%	06.12.13 13:42

QC Summary 464816

PLAINS ALL AMERICAN EH&S

Hobbs Jct.Mainline

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 916137 Matrix: Water Date Prep: 06.12.13

Parent Sample Id: 464702-003 MS Sample Id: 464702-003 S MSD Sample Id: 464702-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0856	86	0.0880	88	70-125	3	25	mg/L	06.12.13 23:58	
Toluene	<0.00200	0.100	0.0819	82	0.0838	84	70-125	2	25	mg/L	06.12.13 23:58	
Ethylbenzene	<0.00100	0.100	0.0868	87	0.0883	88	71-129	2	25	mg/L	06.12.13 23:58	
m,p-Xylenes	<0.00200	0.200	0.174	87	0.177	89	70-131	2	25	mg/L	06.12.13 23:58	
o-Xylene	<0.00100	0.100	0.0901	90	0.0914	91	71-133	1	25	mg/L	06.12.13 23:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		100		80-120	%	06.12.13 23:58
4-Bromofluorobenzene	94		94		80-120	%	06.12.13 23:58

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Brad Ivy
Company Name: Talon/LPE
Company Address: 921 N Bivins St
City/State/Zip: Amarillo, Tx 79107
Telephone No: (432) 678-5414 Fax No: (806) 467-0622
Sampler Signature:
e-mail: Bivy@Talonlpe.com

Project Name: Hobbs Jct. Mainline
Project #: 700376.052.03
Project Loc: Lea Co, NM
PO #: Plains
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only) ORDER #: 464816

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW=Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	MW-7			6.7.13	10:00		3	X		X						GW											X				X
	MW-9			6-7-13	9:30		3	X		X						GW											X				X
	MW-13			6-7-13	13:00		3	X		X						GW											X				X
	MW-18			6-7-13	14:30		3	X		X						GW											X				X
	MW-19			6-7-13	15:00		3	X		X						GW											X				X
	MW-21			6-7-13	16:30		3	X								GW											X				X
	MW-22			6-7-13	15:45		3	X		X						GW											X				X
	MW-23			6-7-13	16:45		3	X		X						GW											X				X
	MW-24			6-7-13	16:15		3	X		X						GW											X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	6.7.13	17:35		6/7/13	5:30
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				6-11-13	13:45

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 2.0 °C

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 06/07/2013 05:30:00 PM

Work Order #: 464816

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6 *Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 06/11/2013

Checklist reviewed by: Kelsey Brooks Date: 06/11/2013

PLAINS
PIPELINE, L.P.

April 24, 2013

RECEIVED

MAY - 6 2013

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Mr. Edward Hansen
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Plains Pipeline, L.P. Hobbs Junction Mainline Release Site
NMOCD Reference # AP-054
Unit Letter M of Section 26, Township 18 South, Range 37 East
Lea County, New Mexico

Dear Mr. Hansen:

Plains Pipeline, L.P. is pleased to submit the attached Quarterly Report, dated April 19, 2013, for the Hobbs Junction Mainline release site located in Section 26 of Township 18 South, and Range 37 East of Lea County, New Mexico. This document summarizes the status of recent activities performed at the site during the first quarter of 2013.

Should you have any questions or comments, please contact me at (575) 441-1099.

Sincerely,

Jason Henry
Remediation Coordinator
Plains Pipeline, L.P.

CC: Geoffrey R. Leking, NMOCD, Hobbs Office

Enclosure

AMARILLO
921 North Bivins
Amarillo, Texas 79107
Phone 806.467.0607
Fax 806.467.0622

AUSTIN
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SAN ANTONIO
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Schertz, Texas 78154
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Fax 210.568.2191

TULSA
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Fax 918.382.0232

HOBBS
318 East Taylor Street
Hobbs, New Mexico 88241
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ENVIRONMENTAL CONSULTING
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Toll Free: 866.742.0742
www.talonlpe.com

April 19, 2013

Mr. Edward Hansen
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Plains Pipeline, L.P. Hobbs Junction Mainline (Plains SRS#2003-00017)
First Quarter 2013 Summary
NMOCD Reference # AP-054
UL-M (SW¼ of the SW¼) of Section 26, T18S, R37E
Latitude: 32° 42' 40.85"N and Longitude: 103° 13' 42.01"W
Landowners: State of New Mexico and Ms. Faye Klein
Lea County, New Mexico

Dear Mr. Hansen:

Talon/LPE (Talon) is submitting this letter report on behalf of Plains Pipeline, L.P. (Plains), which summarizes the site activities that occurred during the first quarter of 2013.

Remediation Activities

During the first quarter of 2013, two (2) specific gravity skimmers with bladder pumps were operating in monitoring wells MW-11 and MW-16. In addition, sixteen (16) total fluids pumps were operating in monitoring wells MW-1 through MW-6, MW-10, MW-11, MW-12, MW-14, MW-15, MW-17 MW-20 and MW-25 through MW-27. The skimmers and pumps are utilized to recover phase separated hydrocarbons (PSH) and to inhibit the migration of the PSH and dissolved-phase plumes. The PSH recovery system is inspected and maintained a minimum of biweekly to optimize recovery rates.

During the first quarter, approximately 14,155 barrels of water was recovered by the system and 14,155 barrels of water was transferred by pump to Occidental Petroleum's North Hobbs Satellite facility for disposal. In addition, approximately 30 barrels of crude oil was recovered by the system during the quarter and approximately 40 barrels of crude oil was inadvertently removed from the recovery tank and was transferred by pump to Occidental Petroleum's North Hobbs Satellite facility. There was approximately 40 barrels of crude oil contained in the recovery tank at the end of the quarter.

Quarterly Sampling Event

On March 15, 2013, the first quarter groundwater sampling event was conducted at the site. Prior to sample collection, the depths to static water levels and to PSH, if present, were measured in all monitor wells using an interface probe. Following a sufficient purge, groundwater samples from ten (10) monitor wells (MW-7, MW-9, MW-13, MW-18, MW-19, MW-21, MW-22, MW-23, MW-24 and MW-25 were collected and submitted to the laboratory for quantification of

benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA SW-846 Method 8021B.

Groundwater samples were not collected from seventeen (17) monitor wells that were impacted with PSH (MW-1 through, MW-6, MW-8, MW-10, MW-11, MW-12, MW-14, MW-15, MW-16, MW-17, MW-20, MW-26, and MW-27).

Groundwater Monitoring Event Results

Data collected from the September groundwater monitoring event exhibited the following results:

- Benzene concentrations ranged from <0.00100 mg/L to 13.7 mg/L. Benzene concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) remediation threshold of 0.010 mg/L in groundwater samples collected from monitor wells MW-19, MW-21, MW-22 and MW-25.
- Toluene concentrations ranged from <0.00100 mg/L to <0.582 mg/L. Toluene concentrations did not exceed the NMWQCC remediation threshold of 0.750 mg/L in any of the groundwater samples collected.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.969 mg/L. The ethylbenzene concentration exceeded the NMWQCC remediation threshold of 0.750 mg/L in the groundwater sample collected from monitor well MW-21.
- Total Xylene concentrations ranged from <0.00100 mg/L to 0.448 mg/L. The total Xylene concentration did not exceed the NMWQCC remediation threshold of 0.620 mg/L in any of the groundwater samples collected.
- Compared to the fourth quarter of 2012 analytical results, dissolved-phase concentrations remained stable.
- Compared to the fourth quarter 2012, groundwater gauging data indicated a increase in groundwater levels by an average of 0.12 feet. The groundwater flow direction is to the east-southeast at a gradient of 0.0042 foot per foot and the average depth to groundwater at the site is approximately 40 feet.
- PSH thicknesses have typically fluctuated from quarter to quarter but have declined overall since PSH recovery operations were initiated. Currently, PSH thicknesses range from 0.12 foot to 4.75 feet.
- Based on the data collected during the first quarter 2013 groundwater monitoring event, both the PSH and dissolved-phase plumes are delineated.

Groundwater elevations and PSH thicknesses are summarized in Table 1, Appendix B, and groundwater analytical results are summarized in Table 2, Appendix B. The first quarter laboratory analytical report and chain of custody documentation are provided in Appendix C. The first quarter site map, gradient and PSH thickness and groundwater dissolved-phase concentration map are located in Appendix A.

Recommendations

- The recovery system is currently performing its tasks of recovering PSH and impeding movement of the dissolved-phase plume. Talon LPE offers no recommendations for the site.

If you have any questions or require further information, please contact me at (940) 329-0691 or Mr. Jeffrey Dann at (713) 646-4657.

Sincerely,

Brad Ivy

Project Manager

Cc: Mr. Jeffrey P. Dann, Plains Pipeline, L.P.

Appendices:

Appendix A ..... Figures

Appendix B ..... Tables

Appendix C ..... Laboratory Analytical Data Reports and Chain of Custody Documentation

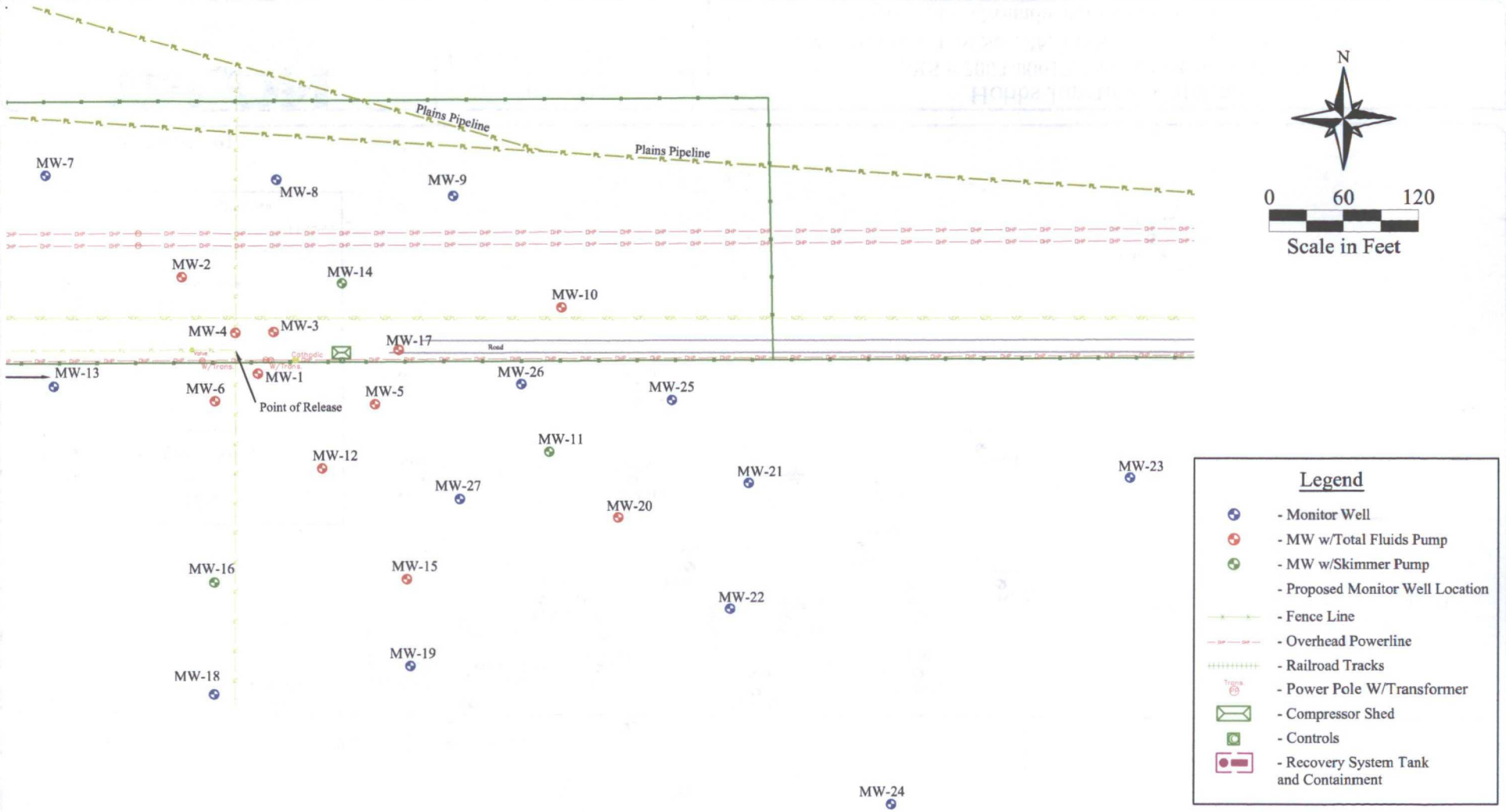
Appendix A

Figures

Figure 1 - Site Layout and Monitor Well Location Map (with proposed monitor well locations)

Figure 2 - Groundwater Gradient Map – 03/15/2013

Figure 3 - Groundwater Concentration and PSH Plume Map - 03/15/2013



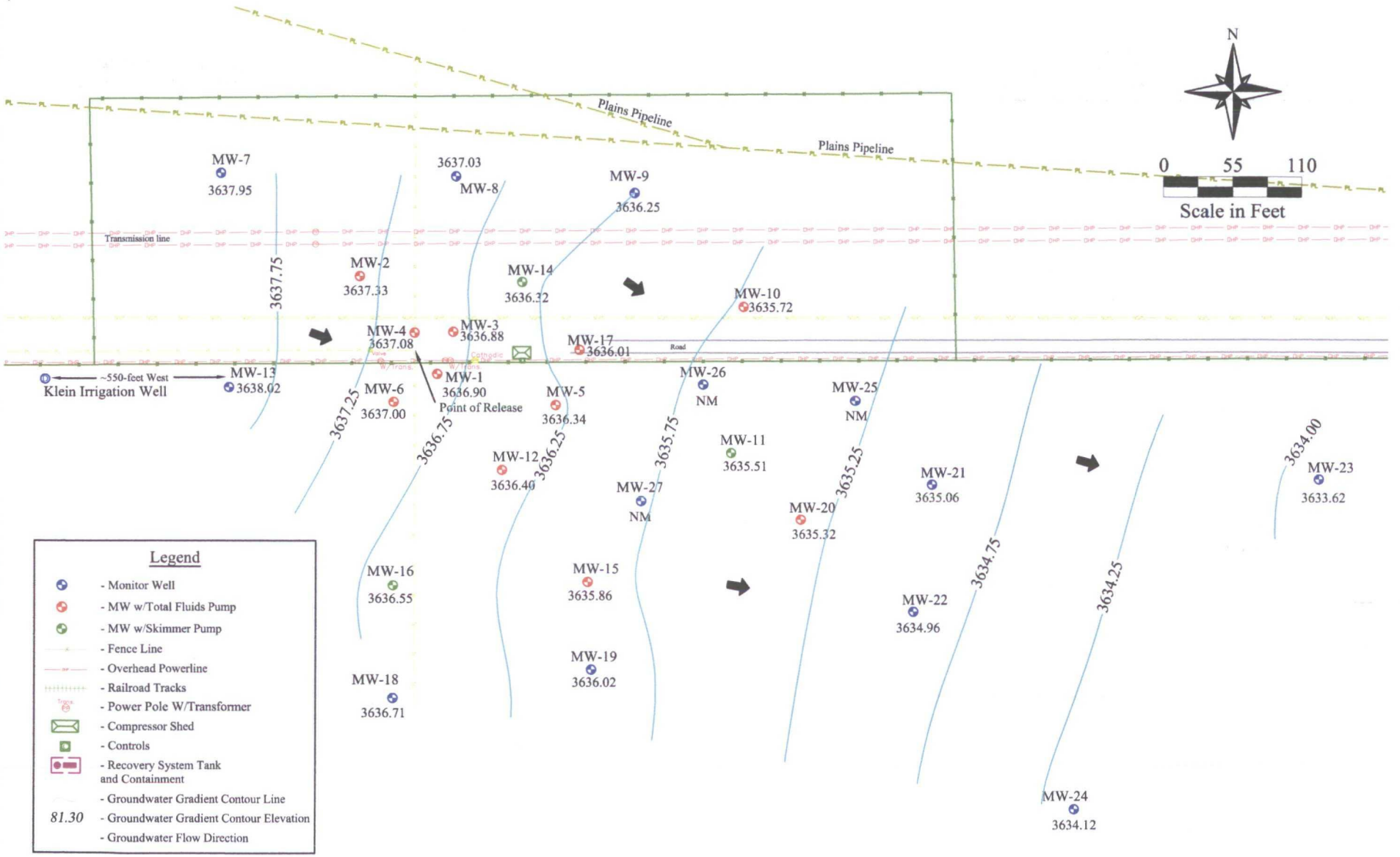
Project # 700376.052.01

TALON LPE

Date: 08/16/2011
Scale: 1" = 120'
Drawn By: TJS

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 1 - Site Map, (12/14/2011)



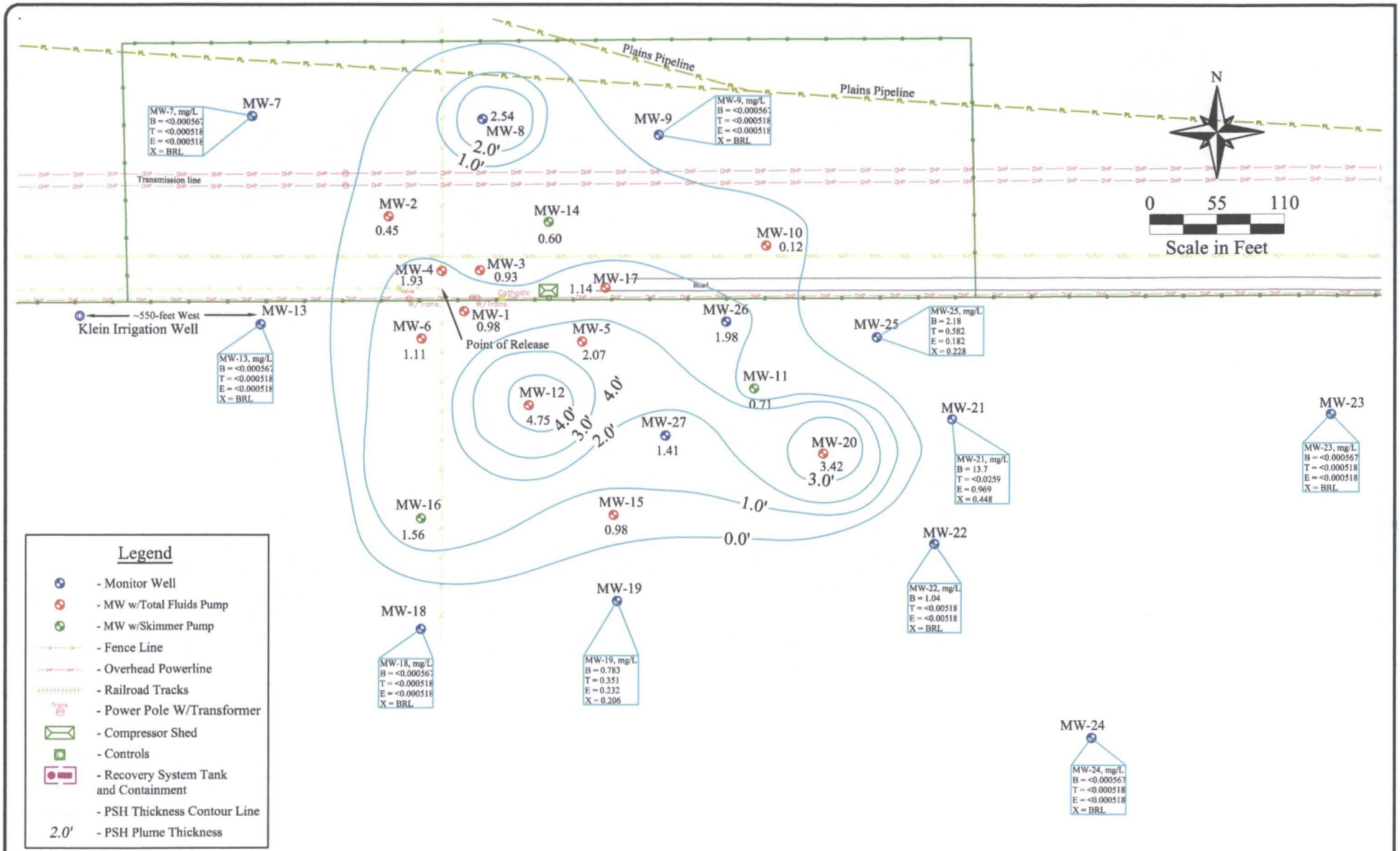
Project = 700376.052.01

TALON LPE

Date: 04/16/2013
Scale: 1" = 110'
Drawn By: TJS

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 2a - Groundwater Gradient Map - 03/15/2013



Project # 700376.052.01

TALON LPE

Date: 04/16/2013
Scale: 1" = 110'
Drawn By: TJS

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054

SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico

Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/18/2013

Appendix B

Tables

Table 1 - Summary of Historical Fluid Level Measurements

Table 2 - Summary of BTEX Groundwater Analytical Data

TALON LPE
"All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-1			Diameter: 4 in.	Screened Interval:	39 ft. to 54 ft.	TD: 54.2 ft.
	03/09/12	3678.50	43.87	40.45	3.42	3637.49
	06/27/12	3678.50	45.23	40.64	4.59	3637.10
	09/18/12	3678.50	44.50	40.92	3.58	3636.99
	12/18/12	3678.50	43.02	41.50	1.52	3636.75
	03/15/13	3678.50	42.42	41.44	0.98	3636.90
MW-2			Diameter: 4 in.	Screened Interval:	38 ft. to 53 ft.	TD: 53.4 ft.
	03/09/12	3679.47	44.57	40.99	3.58	3637.89
	06/27/12	3679.47	43.30	41.76	1.54	3637.46
	09/18/12	3679.47	43.41	41.86	1.55	3637.35
	12/18/12	3679.47	43.90	41.93	1.97	3637.21
	03/15/13	3679.47	42.52	42.07	0.45	3637.33
MW-3			Diameter: 4 in.	Screened Interval:	39 ft. to 54 ft.	TD: 54.7 ft.
	03/09/12	3679.81	45.95	41.60	4.35	3637.49
	06/27/12	3679.81	46.55	41.94	4.61	3637.11
	09/18/12	3679.81	46.72	42.05	4.67	3636.99
	12/18/12	3679.81	45.96	42.40	3.56	3636.82
	03/15/13	3679.81	43.71	42.78	0.93	3636.88
MW-4			Diameter: 4 in.	Screened Interval:	39 ft. to 54 ft.	TD: 54.6 ft.
	03/09/12	3679.64	44.88	41.41	3.47	3637.66
	06/27/12	3679.64	45.50	41.80	3.70	3637.23
	09/18/12	3679.64	45.89	41.83	4.06	3637.14
	12/18/12	3679.64	45.54	42.08	3.46	3636.99
	03/15/13	3679.64	44.17	42.24	1.93	3637.08
MW-5			Diameter: 4 in.	Screened Interval:	40 ft. to 55 ft.	TD: 55 ft.
	03/09/12	3679.26	45.71	41.62	4.09	3636.97
	06/27/12	3679.26	47.13	41.75	5.38	3636.62
	09/18/12	3679.26	46.51	42.00	4.51	3636.52
	12/18/12	3679.26	46.83	42.22	4.61	3636.28
	03/15/13	3679.26	44.65	42.58	2.07	3636.34
MW-6			Diameter: 4 in.	Screened Interval:	40 ft. to 55 ft.	TD: 55 ft.
	03/09/12	3680.63	45.97	42.44	3.53	3637.61
	06/27/12	3680.63	47.08	42.70	4.38	3637.21
	09/18/12	3680.63	46.57	42.95	3.62	3637.08
	12/18/12	3680.63	44.70	43.65	1.05	3636.81
	03/15/13	3680.63	44.56	43.45	1.11	3637.00
MW-7			Diameter: 2 in.	Screened Interval:	38 ft. to 53 ft.	TD: 53 ft.
	03/09/12	3679.85	41.42	-	-	3638.43
	06/27/12	3679.85	41.68	-	-	3638.17
	09/18/12	3679.85	42.00	-	-	3637.85
	12/18/12	3679.85	42.14	-	-	3637.71
	03/15/13	3679.85	41.90	-	-	3637.95
MW-8			Diameter: 2 in.	Screened Interval:	35 ft. to 50 ft.	TD: 50 ft.
	03/09/12	3679.07	42.50	41.35	1.15	3637.53
	06/27/12	3679.07	43.40	41.68	1.72	3637.11
	09/18/12	3679.07	43.91	41.70	2.21	3637.01
	12/18/12	3679.07	44.02	41.83	2.19	3636.88
	03/15/13	3679.07	44.16	41.62	2.54	3637.03
MW-9			Diameter: 2 in.	Screened Interval:	37 ft. to 52 ft.	TD: 52 ft.
	03/09/12	3678.76	41.96	-	-	3636.80
	06/27/12	3678.76	42.33	-	-	3636.43
	09/18/12	3678.76	43.43	-	-	3635.33
	12/18/12	3678.76	42.81	-	-	3635.95
	03/15/13	3678.76	42.51	-	-	3636.25

TALON LPE "All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-10			Diameter: 2 in.	Screened Interval:	37 ft. to 52 ft.	TD: 52 ft.
	03/09/12	3678.36	43.22	41.84	1.38	3636.29
	06/27/12	3678.36	43.00	42.30	0.70	3635.94
	09/18/12	3678.36	44.35	42.19	2.16	3635.81
	12/18/12	3678.36	42.87	42.70	0.17	3635.63
	03/15/13	3678.36	42.74	42.62	0.12	3635.72
MW-11			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	03/09/12	3678.03	44.00	41.56	2.44	3636.07
	06/27/12	3678.03	44.86	41.70	3.16	3635.81
	09/18/12	3678.03	44.40	41.99	2.41	3635.64
	12/18/12	3678.03	45.34	42.05	3.29	3635.44
	03/15/13	3678.03	43.11	42.40	0.71	3635.51
MW-12			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	03/09/12	3679.63	45.75	41.90	3.85	3637.09
	06/27/12	3679.63	47.60	41.95	5.65	3636.75
	09/18/12	3679.63	46.56	42.36	4.20	3636.58
	12/18/12	3679.63	47.52	42.35	5.17	3636.43
	03/15/13	3679.63	47.20	42.45	4.75	3636.40
MW-13			Diameter: 2 in.	Screened Interval:	ft. to ft.	TD: 51.3 ft.
	03/09/12	3681.42	43.18	-	-	3638.24
	06/27/12	3681.42	43.68	-	-	3637.74
	09/18/12	3681.42	43.75	-	-	3637.67
	12/18/12	3681.42	43.92	-	-	3637.50
	03/15/13	3681.42	43.40	-	-	3638.02
MW-14			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	03/09/12	3679.00	45.50	41.31	4.19	3637.00
	06/27/12	3679.00	46.65	41.53	5.12	3636.63
	09/18/12	3679.00	46.60	41.69	4.91	3636.50
	12/18/12	3679.00	44.80	42.33	2.47	3636.26
	03/15/13	3679.00	43.18	42.58	0.60	3636.32
MW-15			Diameter: 4 in.	Screened Interval:	34 ft. to 49 ft.	TD: 49.0 ft.
	03/09/12	3674.92	41.25	37.97	3.28	3636.41
	06/27/12	3674.92	42.20	38.22	3.98	3636.04
	09/18/12	3674.92	41.38	38.49	2.89	3635.95
	12/18/12	3674.92	41.03	38.81	2.22	3635.74
	03/15/13	3674.92	39.88	38.90	0.98	3635.86
MW-16			Diameter: 4 in.	Screened Interval:	33 ft. to 48 ft.	TD: 48 ft.
	03/09/12	3676.86	40.32	39.72	0.60	3637.04
	06/27/12	3676.86	40.85	40.05	0.80	3636.68
	09/18/12	3676.86	40.90	40.16	0.74	3636.58
	12/18/12	3676.86	41.42	40.26	1.16	3636.41
	03/15/13	3676.86	41.61	40.05	1.56	3636.55
MW-17			Diameter: 4 in.	Screened Interval:	36 ft. to 51 ft.	TD: 51 ft.
	03/09/12	3679.01	46.31	41.51	4.80	3636.71
	06/27/12	3679.01	46.80	41.84	4.96	3636.35
	09/18/12	3679.01	45.15	42.37	2.78	3636.18
	12/18/12	3679.01	45.95	42.40	3.55	3636.02
	03/15/13	3679.01	43.95	42.81	1.14	3636.01
MW-18			Diameter: 2 in.	Screened Interval:	30 ft. to 45 ft.	TD: 45 ft.
	03/09/12	3675.68	38.53	-	-	3637.15
	06/27/12	3675.68	38.91	-	-	3636.77
	09/18/12	3675.68	39.03	-	-	3636.65
	12/18/12	3675.68	39.23	-	-	3636.45
	03/15/13	3675.68	38.97	-	-	3636.71

TALON LPE "All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-19			Diameter: 2 in.	Screened Interval: 31 ft. to 46 ft.		TD: 46 ft.
	03/09/12	3674.96	38.47	-	-	3636.49
	06/27/12	3674.96	38.48	-	-	3636.48
	09/18/12	3674.96	38.92	-	-	3636.04
	12/18/12	3674.96	39.12	-	-	3635.84
	03/15/13	3674.96	38.94	-	-	3636.02
MW-20			Diameter: 2 in.	Screened Interval: 31 ft. to 46 ft.		TD: 46 ft.
	03/09/12	3674.38	40.35	38.20	2.15	3635.83
	06/27/12	3674.38	41.25	38.38	2.87	3635.53
	09/18/12	3674.38	41.00	38.58	2.42	3635.40
	12/18/12	3674.38	40.05	39.02	1.03	3635.19
	03/15/13	3674.38	41.92	38.50	3.42	3635.32
MW-21			Diameter: 2 in.	Screened Interval: 23 ft. to 53 ft.		TD: 53.0 ft.
	03/09/12	3674.38	38.87	-	-	3635.51
	06/27/12	3674.38	39.15	-	-	3635.23
	09/18/12	3674.38	39.27	-	-	3635.11
	12/18/12	3674.38	38.64	-	-	3635.74
	03/15/13	3674.38	39.32	-	-	3635.06
MW-22			Diameter: 2 in.	Screened Interval: 20 ft. to 50 ft.		TD: 50 ft.
	03/09/12	3674.07	38.64	-	-	3635.43
	06/27/12	3674.07	38.94	-	-	3635.13
	09/18/12	3674.07	39.07	-	-	3635.00
	12/18/12	3674.07	39.28	-	-	3634.79
	03/15/13	3674.07	39.11	-	-	3634.96
MW-23			Diameter: 2 in.	Screened Interval: 29 ft. to 49 ft.		TD: 49 ft.
	03/09/12	3672.39	39.65	-	-	3632.74
	06/27/12	3672.39	38.68	-	-	3633.71
	09/18/12	3672.39	38.82	-	-	3633.57
	12/18/12	3672.39	39.02	-	-	3633.37
	03/15/13	3672.39	38.77	-	-	3633.62
MW-24			Diameter: 2 in.	Screened Interval: 30 ft. to 50 ft.		TD: 50 ft.
	03/09/12	3672.79	39.48	-	-	3633.31
	06/27/12	3672.79	38.58	-	-	3634.21
	09/18/12	3672.79	38.78	-	-	3634.01
	12/18/12	3672.79	38.93	-	-	3633.86
	03/15/13	3672.79	38.67	-	-	3634.12
MW-25			Diameter: in.	Screened Interval: ft. to ft.		TD: ft.
	03/09/12		40.73	40.73	0.00	
	06/27/12		41.20	41.18	0.02	
	09/18/12		41.33	41.32	0.01	
	12/18/12		41.41	41.40	0.01	
	03/15/13		41.31	-	-	
MW-26			Diameter: in.	Screened Interval: ft. to ft.		TD: ft.
	03/09/12		41.05	40.70	0.35	
	06/27/12		43.90	40.50	3.40	
	09/18/12		44.28	40.55	3.73	
	12/18/12		43.41	41.41	2.00	
	03/15/13		42.98	41.00	1.98	
MW-27			Diameter: in.	Screened Interval: ft. to ft.		TD: ft.
	03/09/12		41.50	37.85	3.65	
	06/27/12		41.97	38.15	3.82	
	09/18/12		41.44	38.41	3.03	
	12/18/12		41.37	38.71	2.66	
	03/15/13		40.21	38.80	1.41	

TALON LPE
"All the Pieces"

Summary of Historical Fluid Level Measurements
Hobbs Junction Main Line
SRS #: 2003-0017

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)

Specific Gravity: 0.835

NG - Not Gauged
NSch - Not scheduled to be gauged
Block - Well blocked/obstructed
Locate - Can not locate/find well
Dry - Well is dry
P&A - Plug and Abandon
WD - Well Destroyed

TALON LPE
"All the Pieces"

Summary of Historical Groundwater Analytical Data
Hobbs Junction Main Line
SRS #: 2003-0017

Sample Designation	Date Sampled	Concentration (mg/L)				
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX
MW-7	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
MW-9	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
MW-13	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
MW-18	03/09/12	BRL	BRL	BRL	BRL	BRL
	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
MW-19	03/09/12	6.33	BRL	0.470	0.102	6.90
	06/28/12	0.491	<0.0174	0.250	BRL	-
	09/18/12	0.204	0.0607	0.0989	0.0427	-
	12/18/12	0.146	0.0720	0.0716	0.0363	-
	03/18/13	0.783	0.351	0.232	0.206	-
MW-21	03/09/12	0.437	BRL	0.323	0.0207	0.786
	06/28/12	4.84	<0.0347	0.257	BRL	-
	09/18/12	9.17	<0.0174	0.694	0.298	-
	12/18/12	7.82	<0.0174	0.563	0.247	-
	03/18/13	13.7	<0.0259	0.969	0.448	-
MW-22	03/09/12	4.38	BRL	0.307	BRL	4.69
	06/28/12	2.27	<0.0347	<0.0326	BRL	-
	09/18/12	0.972	<0.00130	0.0442	BRL	-
	12/18/12	1.76	<0.00347	0.0278	BRL	-
	03/18/13	1.04	<0.00518	<0.00518	BRL	-

TALON LPE
"All the Pieces"

Summary of Historical Groundwater Analytical Data
Hobbs Junction Main Line
SRS #: 2003-0017

Sample Designation	Date Sampled	Concentration (mg/L)				
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX
MW-23	03/09/12	BRL	BRL	BRL	BRL	BRL
	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000310	<0.000259	<0.000291	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
MW-24	03/09/12	BRL	BRL	BRL	BRL	BRL
	06/28/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	12/18/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/18/13	<0.000567	<0.000518	<0.000518	BRL	-
MW-25	03/18/13	2.18	0.582	0.182	0.228	-

Appendix C

Laboratory Analytical Data Reports and Chain of Custody Documentation

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Brad Ivy
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: March 22, 2013

Work Order: 13031919

Project Location: Hobbs, NM
Project Name: Hobbs Junction Mainline
Project Number: 700376.052.01
SRS#: 2003-00017

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
323915	MW-7	water	2013-03-18	11:35	2013-03-19
323916	MW-9	water	2013-03-18	11:50	2013-03-19
323917	MW-13	water	2013-03-18	11:15	2013-03-19
323918	MW-18	water	2013-03-18	10:35	2013-03-19
323919	MW-19	water	2013-03-18	10:20	2013-03-19
323920	MW-21	water	2013-03-18	10:05	2013-03-19
323921	MW-22	water	2013-03-18	10:50	2013-03-19
323922	MW-23	water	2013-03-18	09:40	2013-03-19
323923	MW-24	water	2013-03-18	09:25	2013-03-19
323924	MW-25	water	2013-03-18	12:10	2013-03-19

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Case Narrative

Samples for project Hobbs Junction Mainline were received by TraceAnalysis, Inc. on 2013-03-19 and assigned to work order 13031919. Samples for work order 13031919 were received intact at a temperature of 2.8 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	84599	2013-03-20 at 13:49	99860	2013-03-20 at 13:49
BTEX	S 8021B	84630	2013-03-21 at 15:21	99888	2013-03-21 at 15:21

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 13031919 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 323915 - MW-7

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99860	Date Analyzed:	2013-03-20	Analyzed By:	MT
Prep Batch:	84599	Sample Preparation:	2013-03-20	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0948	mg/L	1	0.100	95	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0980	mg/L	1	0.100	98	80 - 120

Sample: 323916 - MW-9

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99860	Date Analyzed:	2013-03-20	Analyzed By:	MT
Prep Batch:	84599	Sample Preparation:	2013-03-20	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0967	mg/L	1	0.100	97	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0997	mg/L	1	0.100	100	80 - 120

Sample: 323917 - MW-13

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99860	Date Analyzed:	2013-03-20	Analyzed By:	MT
Prep Batch:	84599	Sample Preparation:	2013-03-20	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0959	mg/L	1	0.100	96	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0989	mg/L	1	0.100	99	80 - 120

Sample: 323918 - MW-18

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99860	Date Analyzed:	2013-03-20	Analyzed By:	MT
Prep Batch:	84599	Sample Preparation:	2013-03-20	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0979	mg/L	1	0.100	98	80 - 120
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	80 - 120

Sample: 323919 - MW-19

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99860	Date Analyzed:	2013-03-20	Analyzed By:	MT
Prep Batch:	84599	Sample Preparation:	2013-03-20	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.783**	mg/L	50	0.00100
Toluene		1	**0.351**	mg/L	50	0.00100
Ethylbenzene		1	**0.232**	mg/L	50	0.00100
Xylene		1	**0.206**	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.89	mg/L	50	5.00	98	80 - 120
4-Bromofluorobenzene (4-BFB)			5.05	mg/L	50	5.00	101	80 - 120

Sample: 323920 - MW-21

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99860	Date Analyzed:	2013-03-20	Analyzed By:	MT
Prep Batch:	84599	Sample Preparation:	2013-03-20	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**13.7**	mg/L	50	0.00100
Toluene	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene		1	**0.969**	mg/L	50	0.00100
Xylene		1	**0.448**	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.86	mg/L	50	5.00	97	80 - 120
4-Bromofluorobenzene (4-BFB)			5.02	mg/L	50	5.00	100	80 - 120

Sample: 323921 - MW-22

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99888	Date Analyzed:	2013-03-21	Analyzed By:	MT
Prep Batch:	84630	Sample Preparation:	2013-03-21	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene		1	**1.04**	mg/L	10	0.00100
Toluene	U	1	<0.0100	mg/L	10	0.00100
Ethylbenzene	U	1	<0.0100	mg/L	10	0.00100
Xylene	U	1	<0.0100	mg/L	10	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.934	mg/L	10	1.00	93	80 - 120
4-Bromofluorobenzene (4-BFB)			0.927	mg/L	10	1.00	93	80 - 120

Sample: 323922 - MW-23

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99888	Date Analyzed:	2013-03-21	Analyzed By:	MT
Prep Batch:	84630	Sample Preparation:	2013-03-21	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0941	mg/L	1	0.100	94	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0926	mg/L	1	0.100	93	80 - 120

Sample: 323923 - MW-24

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99860	Date Analyzed:	2013-03-20	Analyzed By:	MT
Prep Batch:	84599	Sample Preparation:	2013-03-20	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	1	<0.00100	mg/L	1	0.00100
Xylene	U	1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0941	mg/L	1	0.100	94	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0959	mg/L	1	0.100	96	80 - 120

Sample: 323924 - MW-25

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	99888	Date Analyzed:	2013-03-21	Analyzed By:	MT
Prep Batch:	84630	Sample Preparation:	2013-03-21	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**2.18**	mg/L	10	0.00100
Toluene		1	**0.582**	mg/L	10	0.00100
Ethylbenzene		1	**0.182**	mg/L	10	0.00100
Xylene		1	**0.228**	mg/L	10	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.939	mg/L	10	1.00	94	80 - 120
4-Bromofluorobenzene (4-BFB)			0.905	mg/L	10	1.00	90	80 - 120

Method Blanks

Method Blank (1) QC Batch: 99860

QC Batch: 99860 | Date Analyzed: 2013-03-20 | Analyzed By: MT
Prep Batch: 84599 | QC Preparation: 2013-03-20 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000567	mg/L	0.001
Toluene		1	<0.000518	mg/L	0.001
Ethylbenzene		1	<0.000518	mg/L	0.001
Xylene		1	<0.000548	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0969	mg/L	1	0.100	97	80 - 120
4-Bromofluorobenzene (4-BFB)			0.101	mg/L	1	0.100	101	80 - 120

Method Blank (1) QC Batch: 99888

QC Batch: 99888 | Date Analyzed: 2013-03-21 | Analyzed By: MT
Prep Batch: 84630 | QC Preparation: 2013-03-21 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000567	mg/L	0.001
Toluene		1	<0.000518	mg/L	0.001
Ethylbenzene		1	<0.000518	mg/L	0.001
Xylene		1	<0.000548	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0931	mg/L	1	0.100	93	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0924	mg/L	1	0.100	92	80 - 120

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 99860 | Date Analyzed: 2013-03-20 | Analyzed By: MT
Prep Batch: 84599 | QC Preparation: 2013-03-20 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0954	mg/L	1	0.100	<0.000567	95	80 - 120
Toluene		1	0.0995	mg/L	1	0.100	<0.000518	100	80 - 120
Ethylbenzene		1	0.0994	mg/L	1	0.100	<0.000518	99	80 - 120
Xylene		1	0.295	mg/L	1	0.300	<0.000548	98	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0958	mg/L	1	0.100	<0.000567	96	80 - 120	0	20
Toluene		1	0.103	mg/L	1	0.100	<0.000518	103	80 - 120	4	20
Ethylbenzene		1	0.104	mg/L	1	0.100	<0.000518	104	80 - 120	4	20
Xylene		1	0.308	mg/L	1	0.300	<0.000548	103	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0960	0.0946	mg/L	1	0.100	96	95	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0969	0.0969	mg/L	1	0.100	97	97	80 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 99888 | Date Analyzed: 2013-03-21 | Analyzed By: MT
Prep Batch: 84630 | QC Preparation: 2013-03-21 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0927	mg/L	1	0.100	<0.000567	93	80 - 120
Toluene		1	0.0979	mg/L	1	0.100	<0.000518	98	80 - 120
Ethylbenzene		1	0.100	mg/L	1	0.100	<0.000518	100	80 - 120
Xylene		1	0.291	mg/L	1	0.300	<0.000548	97	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0932	mg/L	1	0.100	<0.000567	93	80 - 120	0	20
Toluene		1	0.0991	mg/L	1	0.100	<0.000518	99	80 - 120	1	20
Ethylbenzene		1	0.0995	mg/L	1	0.100	<0.000518	100	80 - 120	1	20
Xylene		1	0.293	mg/L	1	0.300	<0.000548	98	80 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0930	0.0921	mg/L	1	0.100	93	92	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0902	0.0887	mg/L	1	0.100	90	89	80 - 120

Matrix Spike (MS-1) Spiked Sample: 323910

QC Batch: 99860 | Date Analyzed: 2013-03-20 | Analyzed By: MT
Prep Batch: 84599 | QC Preparation: 2013-03-20 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0857	mg/L	1	0.100	<0.000567	86	64.6 - 120
Toluene		1	0.0906	mg/L	1	0.100	<0.000518	91	62.9 - 123
Ethylbenzene		1	0.0904	mg/L	1	0.100	<0.000518	90	64.2 - 123
Xylene		1	0.267	mg/L	1	0.300	<0.000548	89	63.1 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0900	mg/L	1	0.100	<0.000567	90	64.6 - 120	5	20
Toluene		1	0.0956	mg/L	1	0.100	<0.000518	96	62.9 - 123	5	20
Ethylbenzene		1	0.0954	mg/L	1	0.100	<0.000518	95	64.2 - 123	5	20
Xylene		1	0.282	mg/L	1	0.300	<0.000548	94	63.1 - 121	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0972	0.0957	mg/L	1	0.1	97	96	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0989	0.0968	mg/L	1	0.1	99	97	80 - 120

Matrix Spike (MS-1) Spiked Sample: 323921

QC Batch: 99888 | Date Analyzed: 2013-03-21 | Analyzed By: MT
Prep Batch: 84630 | QC Preparation: 2013-03-21 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.00	mg/L	10	1.00	1.04	96	64.6 - 120
Toluene		1	0.996	mg/L	10	1.00	<0.00518	100	62.9 - 123
Ethylbenzene		1	1.00	mg/L	10	1.00	<0.00518	100	64.2 - 123
Xylene		1	2.93	mg/L	10	3.00	<0.00548	98	63.1 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.90	mg/L	10	1.00	1.04	86	64.6 - 120	5	20
Toluene		1	0.971	mg/L	10	1.00	<0.00518	97	62.9 - 123	2	20
Ethylbenzene		1	0.974	mg/L	10	1.00	<0.00518	97	64.2 - 123	3	20
Xylene		1	2.86	mg/L	10	3.00	<0.00548	95	63.1 - 121	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.931	0.920	mg/L	10	1	93	92	80 - 120
4-Bromofluorobenzene (4-BFB)	0.905	0.888	mg/L	10	1	90	89	80 - 120

Calibration Standards

Standard (CCV-1)

QC Batch: 99860 | Date Analyzed: 2013-03-20 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.101	101	80 - 120	2013-03-20
Toluene		1	mg/L	0.100	0.105	105	80 - 120	2013-03-20
Ethylbenzene		1	mg/L	0.100	0.106	106	80 - 120	2013-03-20
Xylene		1	mg/L	0.300	0.312	104	80 - 120	2013-03-20

Standard (CCV-2)

QC Batch: 99860 | Date Analyzed: 2013-03-20 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0931	93	80 - 120	2013-03-20
Toluene		1	mg/L	0.100	0.0986	99	80 - 120	2013-03-20
Ethylbenzene		1	mg/L	0.100	0.0985	98	80 - 120	2013-03-20
Xylene		1	mg/L	0.300	0.293	98	80 - 120	2013-03-20

Standard (CCV-3)

QC Batch: 99860 | Date Analyzed: 2013-03-20 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0962	96	80 - 120	2013-03-20
Toluene		1	mg/L	0.100	0.100	100	80 - 120	2013-03-20
Ethylbenzene		1	mg/L	0.100	0.100	100	80 - 120	2013-03-20
Xylene		1	mg/L	0.300	0.299	100	80 - 120	2013-03-20

Standard (CCV-1)

QC Batch: 99888 | Date Analyzed: 2013-03-21 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0970	97	80 - 120	2013-03-21
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2013-03-21
Ethylbenzene		1	mg/L	0.100	0.101	101	80 - 120	2013-03-21
Xylene		1	mg/L	0.300	0.297	99	80 - 120	2013-03-21

Standard (CCV-2)

QC Batch: 99888 | Date Analyzed: 2013-03-21 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0948	95	80 - 120	2013-03-21
Toluene		1	mg/L	0.100	0.100	100	80 - 120	2013-03-21
Ethylbenzene		1	mg/L	0.100	0.0993	99	80 - 120	2013-03-21
Xylene		1	mg/L	0.300	0.293	98	80 - 120	2013-03-21

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 1303919 Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313
200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: TALON LPE
Phone #: 432-522-2133
Address: (Street, City, Zip) 2901 S Hwy 349, Midland, TX
Fax #: 432-522-2183
Contact Person: BRAD IVY
E-mail: BIvy@talonlpe.com
Invoice to: (If different from above) PLAINS SRS # 2003-00017
Project #: 700376.052.01
Project Name: HOBBS JCT MAINLINE
Project Location (including state): HOBBS, NM
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
323915	MW-7	3	VOA	X				X				X		3/18/13	1135
916	MW-9	3	VOA	X				X				X			1150
917	MW-13	3	VOA	X				X				X			1115
918	MW-18	3	VOA	X				X				X			1035
919	MW-19	3	VOA	X				X				X			1020
920	MW-21	3	VOA	X				X				X			1005
921	MW-22	3	VOA	X				X				X			1050
922	MW-23	3	VOA	X				X				X			0940
923	MW-24	3	VOA	X				X				X			0925
924	MW-25	3	VOA	X				X				X		V	1210

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624
BTEX 8021B / 602 / 8260B / 624
TPH 418.1 / TX1005 / TX1005 Ext(C35)
TPH 8015 GRO / DRO / TVHC
PAH 8270C / 625
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7
TCLP Metals Ag As Ba Cd Cr Pb Se Hg
TCLP Volatiles
TCLP Semi Volatiles
TCLP Pesticides
RCI
GC/MS Vol. 8260B / 624
GC/MS Semi. Vol. 8270C / 625
PCB's 8082 / 608
Pesticides 8081A / 608
BOD, TSS, pH
Moisture Content
Turn Around Time if different from standard
Hold

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Ramon A. C	TALON	3/19/13	1:47					

Received by: Company: TAL Date: 3/19/13 Time: 1:47

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
P2.3 / 2.8
Log-in-Review MM

REMARKS:

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #