AP-52

Plains
CS Cayler

Quarterly Report
1/31/14

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January 31, 2014

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

Re: Plains Pipeline, L.P. C.S. Cayler (Plains SRS #2002-10250)
Fourth Quarter 2013 Summary
NMOCD Reference # AP-052 (Old 1R-0382)
UL-M (NW¼ of the NE¼) of Section 6, T17S, R37E
Latitude: 32º 52' 2.45"N and Longitude: 103º 17' 17.73"W
Landowner: Robert Rice
Lea County, New Mexico

Dear Mr. Griswold:

Talon/LPE (Talon) is submitting this letter report on behalf of Plains Pipeline, L.P. (Plains) that summarizes the fourth quarter 2013 groundwater monitoring activities.

Remediation Activities

During the fourth quarter of 2013, one (1) specific gravity skimmer with bladder pump was in operation in monitor well MW-12, and six (6) total fluids pumps were in operation in monitor wells MW-1A, MW-2, MW-2A, MW-4, MW-5 and MW-7A. The skimmer and total fluids pumps are utilized to recover phase separated hydrocarbons (PSH) and to inhibit migration of the PSH and dissolved-phase plumes. The recovery system is inspected and maintained on a weekly basis in order to optimize efficiency and recovery rates.

Also during the quarter, monitor wells MW-3, MW-4, MW-6, MW-11 and MW-18 were plugged, abandoned and replaced by four (4) inch monitor wells MW-3A, MW-4A and MW-6A, and two (2) inch wells MW-11A and MW-18A. MW's 3A, 4A and 6A were installed for greater PSH recovery and to impede dissolved phase plume migration, while 11A and 18A were for down-gradient dissolved phase plume delineation.

Attachments to this letter report include a site plan, gradient map, and a PSH thickness isopleth map combined with dissolved-phase distribution located in Appendix A. A synopsis of the historical groundwater gauging data and groundwater analytical results are provided in Appendix B and the laboratory analytical report with chain-of-custody are located in Appendix C.

During the fourth quarter, the system recovered approximately 2417 barrels of water, all of which was transferred by pump to the Rocky Smith saltwater disposal facility. Approximately 7 barrels of crude oil was recovered by the system.

Fourth Quarter Groundwater Monitoring Event

The fourth quarter 2013 groundwater monitoring event was conducted on December 31, 2013. Prior to the event, the PSH recovery system was shut-down and the recovery pumps were pulled in order to allow the poteniometric surface to stabilize. During the groundwater monitoring event, all monitor wells were measured with an interface probe to determine static water levels and PSH thicknesses if present.

Groundwater samples were collected from nine (9) monitor wells (MW-8A, MW-9A, MW-10A, MW-11A, MW-12A, MW-13A, MW-14A, MW-17 and MW-18A). The samples were submitted to the laboratory for quantification of benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA SW-846, Method 8021B. Groundwater samples were not collected from MW's 1A, 2, 2A, 5, 7A and 12 due to the presence of PSH. Groundwater samples were not collected from monitor wells MW-15 and MW-16 because they were dry. Groundwater samples were not collected from new monitor wells MW-3A, MW-4A, and MW-6A because they had not been developed. It is predicted that PSH will be present in these wells, and they will be a part of the normally scheduled events starting first quarter 2014.

Results of the Groundwater Monitoring Event

Data collected from the December 2013 groundwater monitoring event exhibited the following results.

- Benzene concentrations ranged from <0.00100 mg/L to 16.2 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-8A, MW-12A and MW-18A.
- Toluene concentrations ranged from <0.00100 mg/L to 0.230 mg/L. Toluene concentrations did not exceed the NMWQCC remediation threshold of 0.750 mg/L in groundwater samples collected.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.850 mg/L. Ethylbenzene concentrations exceeded the NMWQCC remediation threshold of 0.750 mg/L in groundwater samples collected from monitor well MW-12A.
- Total xylene concentrations ranged from <0.00100 mg/L to 1.20 mg/L. Total xylene concentrations exceeded the NMWQCC remediation threshold of 0.620 mg/L in groundwater samples collected from monitor well MW-12A.
- Dissolved-phase concentrations remained relatively stable in sampled monitor wells. The dissolved-phase plume is not currently delineated in the southeast direction. MW-18 is currently detecting benzene at a concentration of 0.0864 mg/L.
- PSH thicknesses typically fluctuate from quarter to quarter but have declined overall since PSH recovery operations were initiated. For the fourth quarter, PSH thicknesses exhibited slight to moderate declines in the impacted monitor wells, as compared to the third quarter. The largest decrease in PSH thicknesses occurred in monitor well MW-2 of 0.52 ft.
- Data collected from groundwater monitoring event indicated that groundwater elevations on average have decreased by 0.38ft.

Recommendations

Currently, the system is operating as designed. Talon recommends a new delineation well be drilled south of MW-18A, and plug, abandon and replace dry wells MW-15 and MW-16.

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 Report and Chain of Custody Documentation

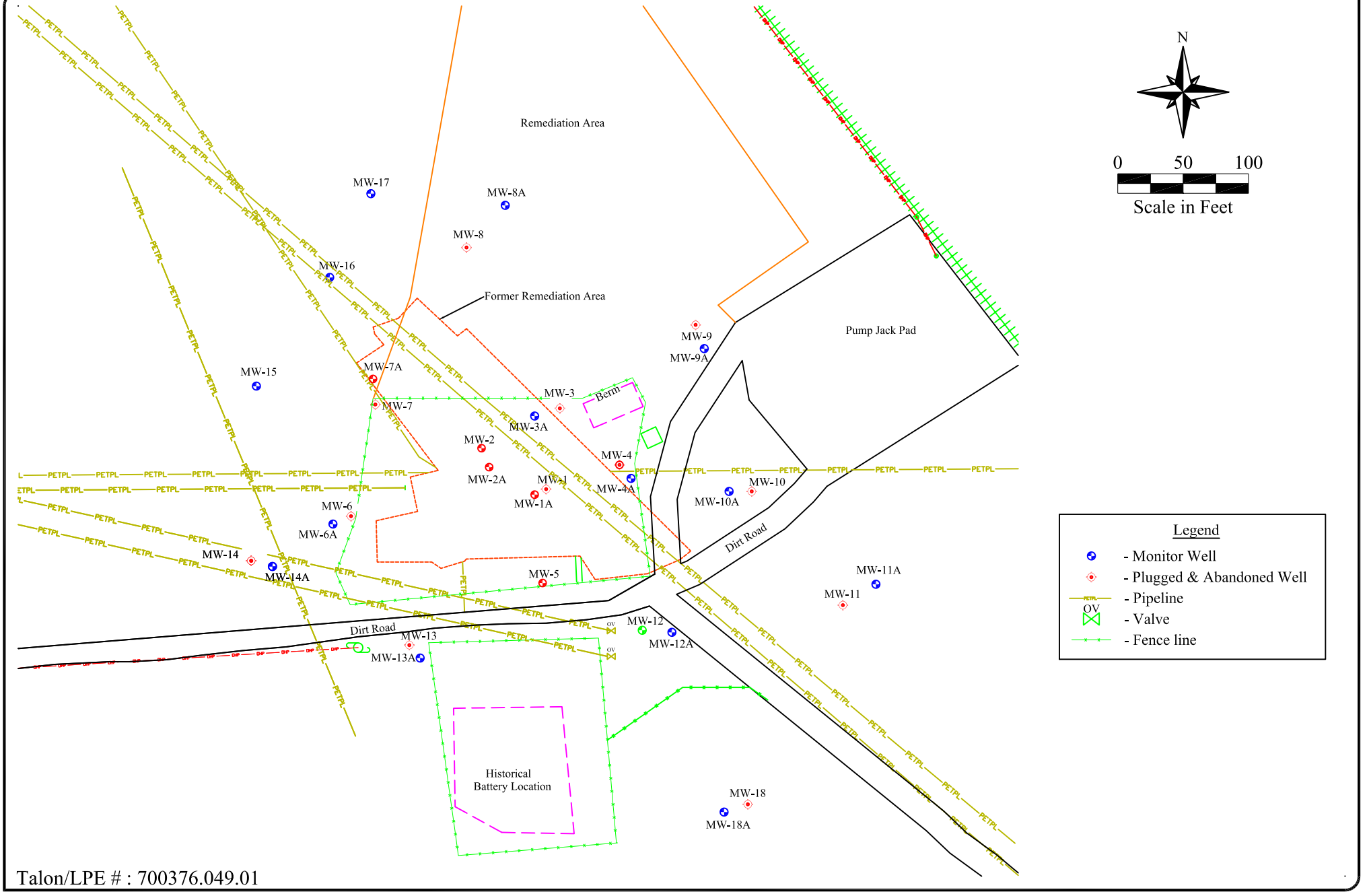
Appendix A

Figures

Figure 1..... Site Layout and Monitor Well Location Map

Figure 2..... Groundwater Gradient Map – 12/10/13

Figure 3..... PSH Distribution and Groundwater Concentration Map – 12/10/13



Talon/LPE # : 700376.049.01

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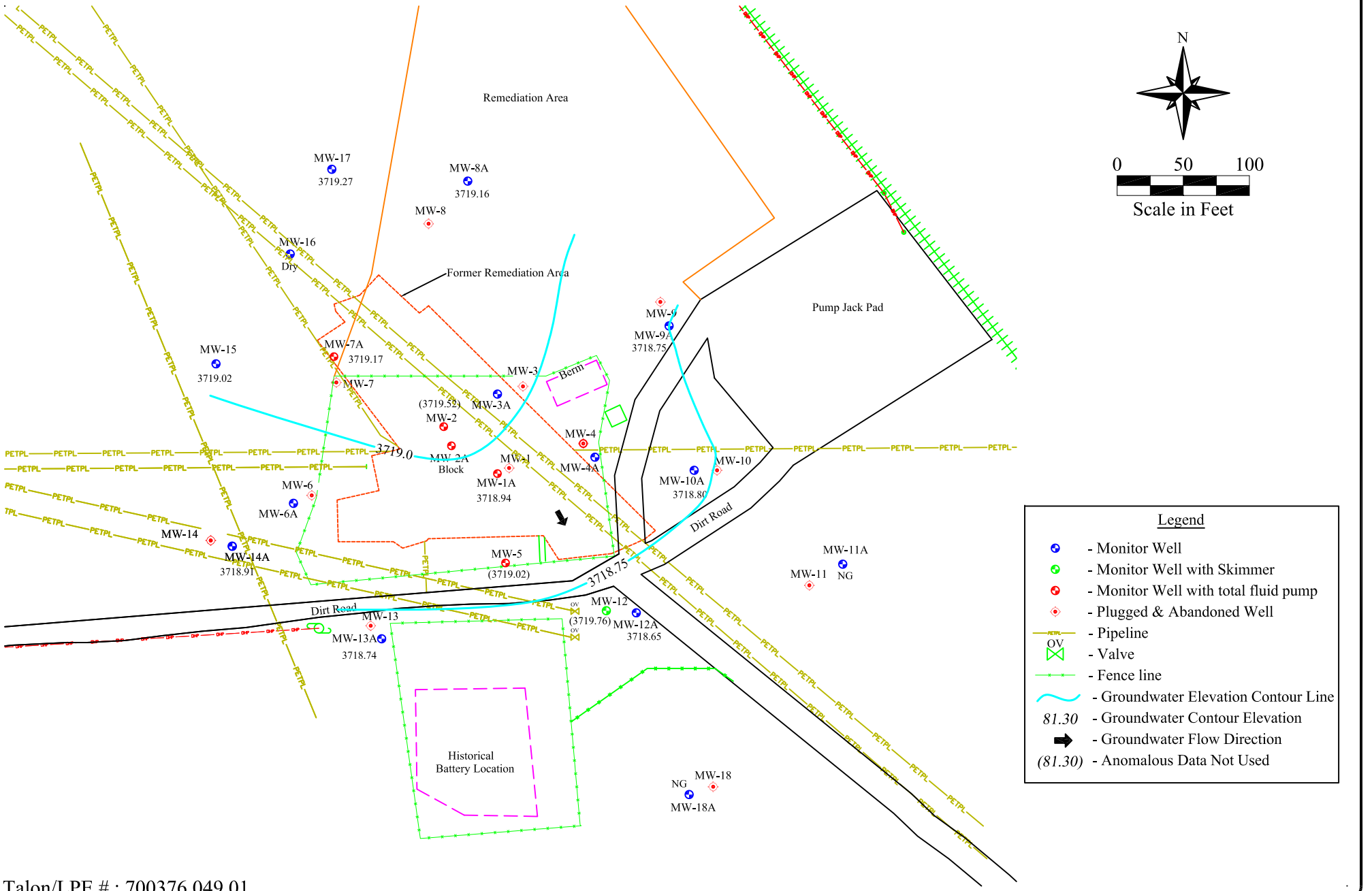
Date:	01/22/2013
Scale:	1" = 100'
Drawn By:	WBS

C.S. Cayler

SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, New Mexico
Figure 1 - Site Plan



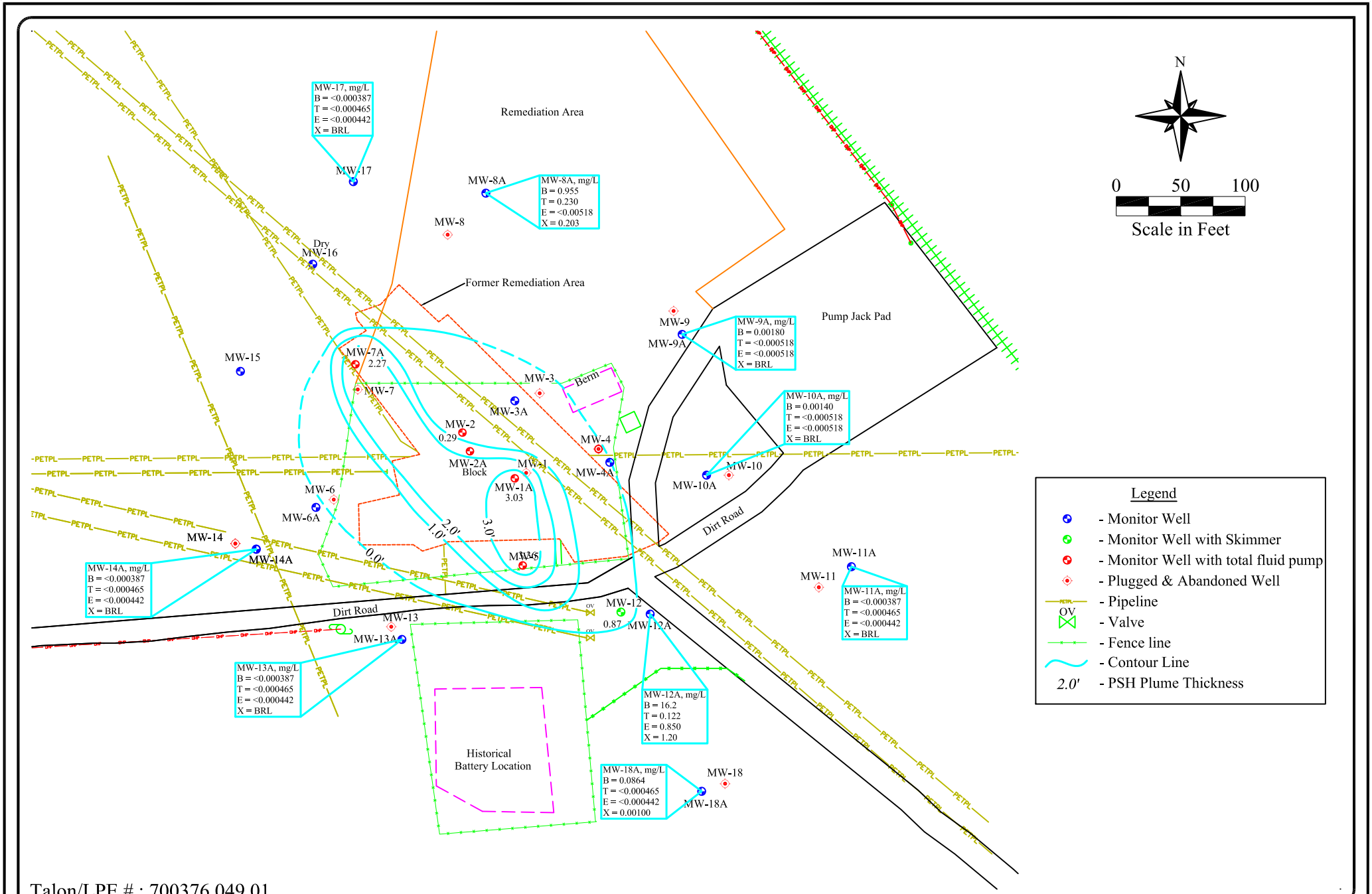
Talon/LPE # : 700376.049.01

TALON LPE

Date: 01/16/2014
Scale: 1" = 100'
Drawn By: TJS

C.S. Cayler

SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, New Mexico
Figure 2d - Groundwater Gradient Map, (12/10/2013)



Talon/LPE # : 700376.049.01

Date:	01/16/2014
Scale:	1" = 100'
Drawn By:	TJS

C.S. Cayler

SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, New Mexico
Figure 3d - PSH Thickness & Groundwater Concentration Map, (12/10/2013)

Appendix B

Tables

Table 1 ..... Summary of Historical Fluid Level Measurements

Table 2 ..... Summary of Groundwater Analytical Results

Summary of Historical Fluid Level Measurements
CS CAYLER
SRS#2002-10250

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-1A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 96.2 ft.
	06/21/12	3810.14	96.20	88.65	7.55	3720.24
	09/21/12	3810.14	94.03	90.05	3.98	3719.43
	12/07/12	3810.14	94.14	89.97	4.17	3719.48
	03/14/13	3810.14	92.11	89.68	2.43	3720.06
	06/11/13	3810.14	92.11	90.51	1.60	3719.37
	09/29/13	3810.14	92.20	91.20	1.00	3718.77
	12/10/13	3810.14	93.73	90.70	3.03	3718.94
MW-2			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 88.1 ft.
	06/21/12	3807.38	88.13	85.64	2.49	3721.33
	09/21/12	3807.38	88.16	86.37	1.79	3720.71
	12/07/12	3807.38	NG	-	-	NG
	06/11/13	3807.38	88.00	86.31	1.69	3720.79
	09/29/13	3807.38	87.97	87.16	0.81	3720.09
	12/10/13	3807.38	88.10	87.81	0.29	3719.52
MW-2A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 109 ft.
	06/21/12	3810.14	95.66	88.60	7.06	3720.38
	09/21/12	3810.14	93.05	90.10	2.95	3719.55
	12/07/12	3810.14	94.63	89.71	4.92	3719.62
	03/14/13	3810.14	93.07	89.31	3.76	3720.21
	06/11/13	3810.14	92.91	90.50	2.41	3719.24
	09/29/13	3810.14	92.94	91.01	1.93	3718.81
	12/10/13	3810.14	Block	-	-	Block
MW-3			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 93.5 ft.
	06/21/12	3810.36	93.53	88.79	4.74	3720.79
	09/21/12	3810.36	93.51	89.57	3.94	3720.14
	12/07/12	3810.36	93.58	89.51	4.07	3720.18
	03/14/13	3810.36	93.33	89.74	3.59	3720.03
	06/11/13	3810.36	NG		-	NG
	09/29/13	3810.36		-	-	
	12/10/13	3810.36	P&A	-	-	P&A
MW-3A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 113 ft.
	01/09/14		91.16	-	-	
MW-4			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 93.2 ft.
	06/21/12	3810.81	92.10	90.35	1.75	3720.17
	09/21/12	3810.81	92.33	91.24	1.09	3719.39
	12/07/12	3810.81	92.57	91.06	1.51	3719.50
	03/14/13	3810.81	91.71	91.18	0.53	3719.54
	06/11/13	3810.81	93.22	90.96	2.26	3719.48
	09/29/13	3810.81	93.20	91.32	1.88	3719.18
	12/10/13	3810.81	P&A	-	-	P&A
MW-4A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 105 ft.
	01/09/14		91.22	-	-	
MW-5			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 93.4 ft.
	06/21/12	3809.29	NG	-	-	NG
	09/21/12	3809.29	NG	-	-	NG
	12/07/12	3809.29	Dry	-	-	Dry
	03/14/13	3809.29	92.34	88.58	3.76	3720.09
	06/11/13	3809.29	93.03	89.25	3.78	3719.42
	09/29/13	3809.29	93.03	89.76	3.27	3718.99
	12/10/13	3809.29	93.08	89.72	3.36	3719.02

Summary of Historical Fluid Level Measurements
CS CAYLER
SRS#2002-10250

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-6			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 88.3 ft.
	06/21/12	3809.33	88.35	88.31	0.04	3721.01
	09/21/12	3809.33	Dry	-	-	Dry
	12/07/12	3809.33	88.41	-	-	3720.92
	03/14/13	3809.33	Dry	-	-	Dry
	06/11/13	3809.33	Dry	-	-	Dry
	09/29/13	3809.33	Dry	-	-	Dry
	12/10/13	3809.33	P&A	-	-	P&A
MW-6A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 113 ft.
	01/09/14		90.72	-	-	
MW-7A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 101 ft.
	06/21/12	3810.63	93.81	89.38	4.43	3720.52
	09/21/12	3810.63	95.60	89.91	5.69	3719.78
	12/07/12	3810.63	95.47	90.06	5.41	3719.68
	03/14/13	3810.63	93.76	89.62	4.14	3720.33
	06/11/13	3810.63	92.86	90.55	2.31	3719.70
	09/29/13	3810.63	92.81	90.91	1.90	3719.41
	12/10/13	3810.63	93.36	91.09	2.27	3719.17
MW-8A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 103 ft.
	06/21/12	3810.73	90.16	-	-	3720.57
	09/21/12	3810.73	90.91	-	-	3719.82
	12/07/12	3810.73	91.05	-	-	3719.68
	03/14/13	3810.73	90.38	-	-	3720.35
	06/11/13	3810.73	91.08	-	-	3719.65
	09/29/13	3810.73	91.09	-	-	3719.64
	12/10/13	3810.73	91.57	-	-	3719.16
MW-9A			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 107 ft.
	06/21/12	3810.73	90.68	-	-	3720.05
	09/21/12	3810.73	91.45	-	-	3719.28
	12/07/12	3810.73	91.50	-	-	3719.23
	03/14/13	3810.73	90.80	-	-	3719.93
	06/11/13	3810.73	91.49	-	-	3719.24
	09/29/13	3810.73	91.46	-	-	3719.27
	12/10/13	3810.73	91.98	-	-	3718.75
MW-10A			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 114 ft.
	06/21/12	3810.41	90.35	-	-	3720.06
	09/21/12	3810.41	91.15	-	-	3719.26
	12/07/12	3810.41	91.10	-	-	3719.31
	03/14/13	3810.41	90.42	-	-	3719.99
	06/11/13	3810.41	91.16	-	-	3719.25
	09/29/13	3810.41	91.18	-	-	3719.23
	12/10/13	3810.41	91.61	-	-	3718.80
MW-11			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 89.1 ft.
	06/21/12	3809.12	89.20	-	-	3719.92
	06/21/12	3809.12	Dry	-	-	Dry
	12/07/12	3809.12	Dry	-	-	Dry
	03/14/13	3809.12	Dry	-	-	Dry
	06/11/13	3809.12	Dry	-	-	Dry
	09/29/13	3809.12	Dry	-	-	Dry
	12/10/13	3809.12	P&A	-	-	P&A
MW-11A			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 113 ft.
	12/10/13		90.34	-	-	

Summary of Historical Fluid Level Measurements
CS CAYLER
SRS#2002-10250

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-12			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 90.8 ft.
	06/21/12	3809.81	90.90	88.57	2.33	3720.86
	09/21/12	3809.81	90.98	89.48	1.50	3720.08
	12/07/12	3809.81	NG	-	-	NG
	03/14/13	3809.81	90.73	88.62	2.11	3720.84
	06/11/13	3809.81	NG	-	-	NG
	09/29/13	3809.81	NG	-	-	NG
	12/10/13	3809.81	90.78	89.91	0.87	3719.76
MW-12A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 109 ft.
	06/21/12	3808.98	89.07	-	-	3719.91
	09/21/12	3808.98	89.92	-	-	3719.06
	12/07/12	3808.98	89.83	-	-	3719.15
	03/14/13	3808.98	89.12	-	-	3719.86
	06/11/13	3808.98	NG	-	-	NG
	12/10/13	3808.98	90.33	-	-	3718.65
MW-13			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 88.9 ft.
	06/20/12	3809.59	P&A	-	-	P&A
MW-13A			Diameter: 4 in.	Screened Interval: ____ ft. to ____ ft.		TD: 108 ft.
	06/21/12	3809.49	89.07	-	-	3720.42
	09/21/12	3809.49	90.15	-	-	3719.34
	12/07/12	3809.49	90.20	-	-	3719.29
	03/14/13	3809.49	89.50	-	-	3719.99
	06/11/13	3809.49	90.26	-	-	3719.23
	09/29/13	3809.49	90.28	-	-	3719.21
	12/10/13	3809.49	90.75	-	-	3718.74
MW-14			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 88 ft.
	06/20/12	3809.63	P&A	-	-	P&A
MW-14A			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 114 ft.
	06/21/12	3809.93	NG	-	-	NG
	09/21/12	3809.93	90.31	-	-	3719.62
	12/07/12	3809.93	90.43	-	-	3719.50
	03/14/13	3809.93	89.88	-	-	3720.05
	06/11/13	3809.93	90.50	-	-	3719.43
	09/29/13	3809.93	90.54	-	-	3719.39
	12/10/13	3809.93	91.02	-	-	3718.91
MW-15			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 92.2 ft.
	06/21/12	3810.93	90.42	-	-	3720.51
	09/21/12	3810.93	91.15	-	-	3719.78
	12/07/12	3810.93	91.28	-	-	3719.65
	03/14/13	3810.93	90.65	-	-	3720.28
	06/11/13	3810.93	91.38	-	-	3719.55
	09/29/13	3810.93	91.26	-	-	3719.67
	12/10/13	3810.93	91.91	-	-	3719.02
MW-16			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 91.2 ft.
	06/21/12	3812.23	91.57	-	-	3720.66
	09/21/12	3812.23	Dry	-	-	Dry
	12/07/12	3812.23	91.80	-	-	3720.43
	03/14/13	3812.23	Dry	-	-	Dry
	06/11/13	3812.23	Dry	-	-	Dry
	09/29/13	3812.23	Dry	-	-	Dry
	12/10/13	3812.23	Dry	-	-	Dry

Summary of Historical Fluid Level Measurements
CS CAYLER
SRS#2002-10250

Well	Date	Top of Casing Elevation (ft)	Depth to Groundwater (ft)	Depth to PSH (ft)	PSH Thickness (ft)	Corrected Groundwater Elevation (ft)
MW-17			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 91 ft.
	06/21/12	3810.57	89.83	-	-	3720.74
	09/21/12	3810.57	90.56	-	-	3720.01
	12/07/12	3810.57	90.72	-	-	3719.85
	03/14/13	3810.57	90.11	-	-	3720.46
	06/11/13	3810.57	90.78	-	-	3719.79
	09/29/13	3810.57	90.73	-	-	3719.84
	12/10/13	3810.57	91.30	-	-	3719.27
MW-18			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 90.1 ft.
	06/21/12	3809.28	89.94	-	-	3719.34
	09/21/12	3809.28	93.05	90.10	2.95	3718.69
	12/07/12	3809.28	Dry	-	-	Dry
	03/14/13	3809.28	89.59	-	-	3719.69
	06/11/13	3809.28	Dry	-	-	Dry
	09/29/13	3809.28	Dry	-	-	Dry
	12/10/13	3809.28	P&A	-	-	P&A
MW-18A			Diameter: 2 in.	Screened Interval: ____ ft. to ____ ft.		TD: 113 ft.
	12/10/13		90.97	-	-	

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

Summary of Historical Groundwater Analytical Data
CS CAYLER
SRS#2002-10250

Sample Designation	Date Sampled	Concentration (mg/L)				
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX
MW-8A	06/27/12	0.159	0.0985	0.00930	0.0424	-
	09/21/12	0.130	0.0737	0.00710	0.0336	0.244
	12/07/12	0.344	0.175	0.0219	0.0561	-
	03/20/13	1.20	0.617	0.0535	0.290	-
	06/11/13	0.113	0.0621	0.00774	0.0260	0.209
	09/29/13	1.56	0.328	<0.0104	0.184	-
	12/31/13	0.955	0.230	<0.00518	0.203	-
MW-9A	06/27/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/21/12	0.00778	<0.00100	<0.000700	U	0.00778
	12/07/12	0.0532	<0.000347	0.00230	0.00200	-
	03/20/13	<0.000567	<0.000518	<0.000518	BRL	-
	06/11/13	0.00885	<0.00100	0.00103	U	0.00988
	09/29/13	0.0298	<0.000518	<0.000518	BRL	-
	12/31/13	0.00180	<0.000518	<0.000518	BRL	-
MW-10A	06/27/12	0.0429	0.00840	<0.000326	0.00330	-
	09/21/12	0.00219	<0.00100	<0.000700	0.00200	0.00419
	12/07/12	0.0700	0.0226	0.00360	0.00740	-
	03/20/13	0.0254	0.00530	<0.000442	0.00250	-
	06/11/13	0.0479	0.0207	0.00245	0.00663	0.0777
	09/29/13	0.00200	<0.000518	<0.000518	BRL	-
	12/31/13	0.00140	<0.000518	<0.000518	BRL	-
MW-11A	12/31/13	<0.000387	<0.000465	<0.000442	BRL	-
MW-12A	06/27/12	17.5	1.56	0.707	1.15	-
	09/21/12	13.7	1.04	0.402	0.534	15.7
	12/07/12	16.6	1.15	0.758	0.996	-
	03/20/13	13.6	2.97	0.720	1.48	-
	06/11/13	10.4	<0.0500	0.308	0.368	11.1
	12/31/13	16.2	0.122	0.850	1.20	-

Summary of Historical Groundwater Analytical Data
CS CAYLER
SRS#2002-10250

Sample Designation	Date Sampled	Concentration (mg/L)				
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX
MW-13A	06/27/12	0.00360	0.00160	<0.000326	BRL	-
	09/21/12	<0.000500	<0.00100	<0.000700	U	U
	12/07/12	0.00170	0.00110	<0.000326	BRL	-
	03/20/13	<0.000387	<0.000465	<0.000442	BRL	-
	06/11/13	<0.000500	<0.00100	<0.000700	U	U
	09/29/13	<0.000567	<0.000518	<0.000518	BRL	-
	12/31/13	<0.000387	<0.000465	<0.000442	BRL	-
MW-14A	06/26/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/21/12	0.00351	<0.00100	<0.000700	U	0.00351
	12/07/12	0.00810	<0.000347	<0.000326	BRL	-
	03/20/13	<0.000387	<0.000465	<0.000442	BRL	-
	06/11/13	<0.000500	<0.00100	<0.000700	U	U
	09/29/13	<0.000567	<0.000518	<0.000518	BRL	-
	12/31/13	<0.000387	<0.000465	<0.000442	BRL	-
MW-15	06/26/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/21/12	<0.000500	<0.00100	<0.000700	U	U
	12/07/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/20/13	<0.000387	<0.000465	<0.000442	BRL	-
	06/11/13	<0.000500	<0.00100	<0.000700	U	U
	09/29/13	<0.000567	<0.000518	<0.000518	BRL	-
MW-17	06/26/12	<0.000371	<0.000347	<0.000326	BRL	-
	09/21/12	0.00112	<0.00100	<0.000700	U	0.00112
	12/07/12	<0.000371	<0.000347	<0.000326	BRL	-
	03/20/13	<0.000387	<0.000465	<0.000442	BRL	-
	06/11/13	<0.000500	<0.00100	<0.000700	U	U
	09/29/13	<0.000567	<0.000518	<0.000518	BRL	-
	12/31/13	<0.000387	<0.000465	<0.000442	BRL	-
MW-18A	12/31/13	0.0864	<0.000465	<0.000442	0.00100	-

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
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(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

(Corrected Report)

Brad Ivy
Talon LPE-Amarillo
921 North Bivins
Amarillo, TX, 79107

Report Date: January 30, 2014

Work Order: 14010303

Project Location: Lea Co. New Mexico
Project Name: C.S. Caylor
Project Number: 700376.049.01
SRS #: 2002-10250

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
350552	MW-8A	water	2013-12-31	10:20	2013-12-31
350553	MW-9A	water	2013-12-31	10:40	2013-12-31
350554	MW-10A	water	2013-12-31	11:00	2013-12-31
350555	MW-11A	water	2013-12-31	11:20	2013-12-31
350556	MW-12A	water	2013-12-31	11:40	2013-12-31
350557	MW-13A	water	2013-12-31	12:00	2013-12-31
350558	MW-14A	water	2013-12-31	12:20	2013-12-31
350560	MW-17	water	2013-12-31	13:20	2013-12-31
350561	MW-18A	water	2013-12-31	13:00	2013-12-31

Report Corrections (Work Order 14010303)

- 1/30/14: Corrected Project Name and Field Code on sample 350561.

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.

This report consists of a total of 17 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project C.S. Caylor were received by TraceAnalysis, Inc. on 2013-12-31 and assigned to work order 14010303. Samples for work order 14010303 were received damaged without headspace and at a temperature of 3.0 C. Several frozen VOAs. No sample for MW-15 all frozen and broken.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	91425	2014-01-03 at 15:28	108023	2014-01-03 at 15:28
BTEX	S 8021B	91507	2014-01-08 at 15:44	108141	2014-01-08 at 15:44

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 14010303 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: 350552 - MW-8A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108141	Date Analyzed:	2014-01-08	Analyzed By:	MT
Prep Batch:	91507	Sample Preparation:	2014-01-08	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.955**	mg/L	10	0.00100
Toluene		1	**0.230**	mg/L	10	0.00100
Ethylbenzene	U	1	<0.0100	mg/L	10	0.00100
Xylene		1	**0.203**	mg/L	10	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.919	mg/L	10	1.00	92	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.884	mg/L	10	1.00	88	74.6 - 120

Sample: 350553 - MW-9A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108141	Date Analyzed:	2014-01-08	Analyzed By:	MT
Prep Batch:	91507	Sample Preparation:	2014-01-08	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.00180**	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)			0.0949	mg/L	1	0.100	95	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.0849	mg/L	1	0.100	85	74.6 - 120

Sample: 350554 - MW-10A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108141	Date Analyzed:	2014-01-08	Analyzed By:	MT
Prep Batch:	91507	Sample Preparation:	2014-01-08	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene		1	**0.00140**	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)			0.0958	mg/L	1	0.100	96	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.0874	mg/L	1	0.100	87	74.6 - 120

Sample: 350555 - MW-11A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108023	Date Analyzed:	2014-01-03	Analyzed By:	JS
Prep Batch:	91425	Sample Preparation:	2014-01-03	Prepared By:	JS

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0936	mg/L	1	0.100	94	68.8 - 120
4-Bromofluorobenzene (4-BFB)			0.0951	mg/L	1	0.100	95	67.5 - 120

Sample: 350556 - MW-12A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108023	Date Analyzed:	2014-01-03	Analyzed By:	JS
Prep Batch:	91425	Sample Preparation:	2014-01-03	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qs	1	**16.2**	mg/L	50	0.00100
Toluene	Qs	1	**0.122**	mg/L	50	0.00100
Ethylbenzene	Qr,Qs	1	**0.850**	mg/L	50	0.00100
Xylene	Qr,Qs	1	**1.20**	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			5.09	mg/L	50	5.00	102	68.8 - 120
4-Bromofluorobenzene (4-BFB)			4.88	mg/L	50	5.00	98	67.5 - 120

Sample: 350557 - MW-13A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108023	Date Analyzed:	2014-01-03	Analyzed By:	JS
Prep Batch:	91425	Sample Preparation:	2014-01-03	Prepared By:	JS

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0892	mg/L	1	0.100	89	68.8 - 120
4-Bromofluorobenzene (4-BFB)			0.0894	mg/L	1	0.100	89	67.5 - 120

Sample: 350558 - MW-14A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108023	Date Analyzed:	2014-01-03	Analyzed By:	JS
Prep Batch:	91425	Sample Preparation:	2014-01-03	Prepared By:	JS

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0760	mg/L	1	0.100	76	68.8 - 120
4-Bromofluorobenzene (4-BFB)			0.0764	mg/L	1	0.100	76	67.5 - 120

Sample: 350560 - MW-17

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108023	Date Analyzed:	2014-01-03	Analyzed By:	JS
Prep Batch:	91425	Sample Preparation:	2014-01-03	Prepared By:	JS

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0971	mg/L	1	0.100	97	68.8 - 120
4-Bromofluorobenzene (4-BFB)			0.0976	mg/L	1	0.100	98	67.5 - 120

Sample: 350561 - MW-18A

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	108023	Date Analyzed:	2014-01-03	Analyzed By:	JS
Prep Batch:	91425	Sample Preparation:	2014-01-03	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qs	1	**0.0864**	mg/L	1	0.00100
Toluene	Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs	1	<0.00100	mg/L	1	0.00100
Xylene	B,Qr,Qs	1	**0.00100**	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0814	mg/L	1	0.100	81	68.8 - 120
4-Bromofluorobenzene (4-BFB)			0.0842	mg/L	1	0.100	84	67.5 - 120

Method Blanks

Method Blank (1) QC Batch: 108023

QC Batch: 108023 | Date Analyzed: 2014-01-03 | Analyzed By: JS
Prep Batch: 91425 | QC Preparation: 2014-01-03 | Prepared By: JS

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000387	mg/L	0.001
Toluene		1	<0.000465	mg/L	0.001
Ethylbenzene		1	<0.000442	mg/L	0.001
Xylene		1	0.00240	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0938	mg/L	1	0.100	94	68.8 - 120
4-Bromofluorobenzene (4-BFB)			0.0944	mg/L	1	0.100	94	67.5 - 120

Method Blank (1) QC Batch: 108141

QC Batch: 108141 | Date Analyzed: 2014-01-08 | Analyzed By: MT
Prep Batch: 91507 | QC Preparation: 2014-01-08 | 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)			0.0954	mg/L	1	0.100	95	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.0861	mg/L	1	0.100	86	74.6 - 120

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 108023 | Date Analyzed: 2014-01-03 | Analyzed By: JS
Prep Batch: 91425 | QC Preparation: 2014-01-03 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0954	mg/L	1	0.100	<0.000387	95	71.6 - 120
Toluene		1	0.0974	mg/L	1	0.100	<0.000465	97	71.6 - 120
Ethylbenzene		1	0.0959	mg/L	1	0.100	<0.000442	96	71.1 - 120
Xylene		1	0.287	mg/L	1	0.300	0.0024	95	72.5 - 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	0.0951	mg/L	1	0.100	<0.000387	95	71.6 - 120	0	20
Toluene		1	0.0972	mg/L	1	0.100	<0.000465	97	71.6 - 120	0	20
Ethylbenzene		1	0.0958	mg/L	1	0.100	<0.000442	96	71.1 - 120	0	20
Xylene		1	0.289	mg/L	1	0.300	0.0024	96	72.5 - 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)	0.0968	0.0911	mg/L	1	0.100	97	91	68.8 - 120
4-Bromofluorobenzene (4-BFB)	0.0982	0.0974	mg/L	1	0.100	98	97	67.5 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 108141 | Date Analyzed: 2014-01-08 | Analyzed By: MT
Prep Batch: 91507 | QC Preparation: 2014-01-08 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.101	mg/L	1	0.100	<0.000567	101	74.3 - 120
Toluene		1	0.103	mg/L	1	0.100	<0.000518	103	77.6 - 120
Ethylbenzene		1	0.104	mg/L	1	0.100	<0.000518	104	78.5 - 120
Xylene		1	0.303	mg/L	1	0.300	<0.000548	101	77.6 - 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	0.102	mg/L	1	0.100	<0.000567	102	74.3 - 120	1	20
Toluene		1	0.103	mg/L	1	0.100	<0.000518	103	77.6 - 120	0	20
Ethylbenzene		1	0.103	mg/L	1	0.100	<0.000518	103	78.5 - 120	1	20
Xylene		1	0.300	mg/L	1	0.300	<0.000548	100	77.6 - 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)	0.0965	0.0955	mg/L	1	0.100	96	96	75.4 - 120
4-Bromofluorobenzene (4-BFB)	0.100	0.0972	mg/L	1	0.100	100	97	74.6 - 120

Matrix Spike (MS-1) Spiked Sample: 350233

QC Batch: 108023 | Date Analyzed: 2014-01-03 | Analyzed By: JS
Prep Batch: 91425 | QC Preparation: 2014-01-03 | Prepared By: JS

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	Qs	Qs	1	0.0517	mg/L	1	0.100	<0.000387	52	54.2 - 120
Toluene	Qs	Qs	1	0.0526	mg/L	1	0.100	<0.000465	53	55.6 - 120
Ethylbenzene	Qs	Qs	1	0.0519	mg/L	1	0.100	0.0008	51	59.6 - 120
Xylene	Qs	Qs	1	0.158	mg/L	1	0.300	0.0093	50	61.4 - 120

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	0.0627	mg/L	1	0.100	<0.000387	63	54.2 - 120	19	20
Toluene		1	0.0637	mg/L	1	0.100	<0.000465	64	55.6 - 120	19	20
Ethylbenzene	Qr	Qr	1	0.0638	mg/L	1	0.100	0.0008	63	59.6 - 120	21	20
Xylene	Qr	Qr	1	0.196	mg/L	1	0.300	0.0093	62	61.4 - 120	22	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)	0.0929	0.0922	mg/L	1	0.1	93	92	68.8 - 120
4-Bromofluorobenzene (4-BFB)	0.0977	0.0962	mg/L	1	0.1	98	96	67.5 - 120

Matrix Spike (MS-1) Spiked Sample: 350552

QC Batch: 108141 | Date Analyzed: 2014-01-08 | Analyzed By: MT
Prep Batch: 91507 | QC Preparation: 2014-01-08 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.93	mg/L	10	1.00	0.955	98	50.2 - 129
Toluene		1	1.21	mg/L	10	1.00	0.23	98	58.1 - 129
Ethylbenzene		1	0.962	mg/L	10	1.00	<0.00518	96	58.1 - 127
Xylene		1	3.02	mg/L	10	3.00	0.203	94	53.1 - 128

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	1.88	mg/L	10	1.00	0.955	92	50.2 - 129	3	20
Toluene		1	1.19	mg/L	10	1.00	0.23	96	58.1 - 129	2	20
Ethylbenzene		1	0.950	mg/L	10	1.00	<0.00518	95	58.1 - 127	1	20
Xylene		1	2.97	mg/L	10	3.00	0.203	92	53.1 - 128	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)	0.937	0.947	mg/L	10	1	94	95	75.4 - 120
4-Bromofluorobenzene (4-BFB)	0.985	0.987	mg/L	10	1	98	99	74.6 - 120

Calibration Standards

Standard (CCV-1)

QC Batch: 108023 | Date Analyzed: 2014-01-03 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0961	96	80 - 120	2014-01-03
Toluene		1	mg/L	0.100	0.0985	98	80 - 120	2014-01-03
Ethylbenzene		1	mg/L	0.100	0.0979	98	80 - 120	2014-01-03
Xylene		1	mg/L	0.300	0.295	98	80 - 120	2014-01-03

Standard (CCV-2)

QC Batch: 108023 | Date Analyzed: 2014-01-03 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0966	97	80 - 120	2014-01-03
Toluene		1	mg/L	0.100	0.0977	98	80 - 120	2014-01-03
Ethylbenzene		1	mg/L	0.100	0.0960	96	80 - 120	2014-01-03
Xylene		1	mg/L	0.300	0.287	96	80 - 120	2014-01-03

Standard (CCV-3)

QC Batch: 108023 | Date Analyzed: 2014-01-03 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0958	96	80 - 120	2014-01-03
Toluene		1	mg/L	0.100	0.0975	98	80 - 120	2014-01-03
Ethylbenzene		1	mg/L	0.100	0.0947	95	80 - 120	2014-01-03
Xylene		1	mg/L	0.300	0.283	94	80 - 120	2014-01-03

Standard (CCV-1)

QC Batch: 108141 Date Analyzed: 2014-01-08 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	0.104	104	80 - 120	2014-01-08
Toluene		1	mg/L	0.100	0.105	105	80 - 120	2014-01-08
Ethylbenzene		1	mg/L	0.100	0.106	106	80 - 120	2014-01-08
Xylene		1	mg/L	0.300	0.309	103	80 - 120	2014-01-08

Standard (CCV-2)

QC Batch: 108141 Date Analyzed: 2014-01-08 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	2014-01-08
Toluene		1	mg/L	0.100	0.102	102	80 - 120	2014-01-08
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2014-01-08
Xylene		1	mg/L	0.300	0.299	100	80 - 120	2014-01-08

Standard (CCV-3)

QC Batch: 108141 Date Analyzed: 2014-01-08 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	2014-01-08
Toluene		1	mg/L	0.100	0.102	102	80 - 120	2014-01-08
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2014-01-08
Xylene		1	mg/L	0.300	0.300	100	80 - 120	2014-01-08

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	T104704219-13-9	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 # 14010303

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

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Talon LPE
Phone #: 806-467-0607
Address: (Street, City, Zip) 921 N. Bivins Amarillo, TX 79107
Fax #: 806-467-0622
Contact Person: Brad Ivy
E-mail: bivy@talonlpe.com and cjbryant@paaplp.com
Invoice to: (If different from above) Plains: SRS# 2002-10250
Project #: 700376.049.01
Project Name: C.S. Cayler
Project Location (including state): Lea Co, 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	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
350552	MW-8A	3		X				X				X		12-31-13	10:20		X																							
553	MW-9A	~~3~~ 2		X				X				X		12-31-13	10:40		X																							
554	MW-10A	3		X				X				X		12-31-13	11:00		X																							
555	MW-11A	3		X				X				X		12-31-13	11:20		X																							
556	MW-12A	3		X				X				X		12-31-13	11:40		X																							
557	MW-13A	3		X				X				X		12-31-13	12:00		X																							
558	MW-14A	3		X				X				X		12-31-13	12:20		X																							
559	MW-15 all frozen	~~3~~		X				X				X		12-31-13	12:40		~~X~~																							
560	MW-17	3		X				X				X		12-31-13	13:20		X																							
561	MW-18-A	3		X				X				X		12-31-13	13:00		X																							

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Talon/LPE	12-31-13	16:30	John G Brenda Clark		12-31-13	4:30	INST ___ °C OBS 2 °C COR ___ °C
								INST ___ °C OBS ___ °C COR ___ °C
				Brenda Wood	TA Lubbock	1/3/14	9:00	INST IR-3 °C OBS 1.1 °C COR 1.0 °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:

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