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### NOVEMBER 2015 POTENTIOMETRIC MAP TR 31-5-697

39.56074 -108.24137  
Section 5, Township 6 South, Range 97 West

- Monitoring Well
- Potentiometric Lines
- Intermittent Stream
- Perennial Stream

#### TRANSPORTATION

- Highways
- County Roads
- Local Roads
- Access Roads



HRL COMPLIANCE SOLUTIONS, INC.  
Environmental Consultants

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Date: 11/10/2015

Table 1

TR 31-5-697 Groundwater Analytical Results



Sample ID:		COGCC Table 910-1 Standards	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 1	MW 2	MW 2	MW 2
Date Sampled:			10/19/2011	4/9/2012	7/12/2012	9/18/2012	12/5/2012	3/27/2013	5/15/2013	7/26/2013	11/8/2013	5/29/2014	10/8/2014	6/1/2015	10/13/2015	10/19/2011	4/9/2012	7/12/2012
Depth to Water (ft.)			22.51	22.07	NT	24.09	24.26	23.65	23.637	24.42	26.2	24.76	25.84	21.65	25.67	26.41	25.87	NT
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.6	ND
GRO	mg/L		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8	2.5
Benzene	ug/l	5 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	70	98
Ethylbenzene	ug/l	700 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	92	58	56
Toluene	ug/l	560 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	2.6
Xylene (total)	ug/l	1400 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,600	1,200	470
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	NT	7.5	ND	ND
2-Chloronaphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	NT	ND	ND	ND
2-Methylnaphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	NT	13	ND	ND
Acenaphthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	NT	ND	ND	ND
Anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	NT	ND	ND	ND
Benzo(k)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	7	ND
Phenanthrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	NT	ND	ND	ND
Pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis																		
Calcium	mg/l		87	64	78	71	68	73	84	76	78	84	NT	90	87	7.7	54	71
Iron	mg/l		0.12	ND	1.1	0.55	0.12	1.3	ND	ND	ND	0.12	NT	ND	ND	ND	0.13	0.44
Magnesium	mg/l		43	32	37	34	33	37	42	38	39	42	NT	45	44	39	28	34
Manganese	mg/l		ND	ND	0.036	0.024	0.023	1	0.29	0.042	ND	ND	NT	ND	ND	0.95	0.47	0.53
Potassium	mg/l		1.1	0.64	0.9	0.98	0.74	14	1.1	0.73	0.82	0.8	NT	1.1	0.77	1.2	0.79	1.6
Sodium	mg/l		68	49	56	74	51	57	59	56	59	60	NT	65	64	85	59	83
General Chemistry																		
Bromide	mg/l		0.34	0.28	0.3	0.33	0.26	0.34	0.41	0.33	0.34	0.44	ND	0.32	0.41	0.41	0.34	0.45
Chloride	mg/l	1.25 x bkgd	42	52	45	47	41	44	57	48	48	34	61	58	58	53	45	53
Nitrogen, Nitrate	mg/l		1.1	1.5	1.1	0.7	0.64	1.2	1.2	0.94	NT	NT	NT	2.4	NT	0.047	0.18	ND
Nitrogen, Nitrite	mg/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	ND	ND	ND
Nitrogen, Nitrate-Nitrite			1.1	1.5	1.1	0.7	0.64	1.2	1.2	0.94	NT	1.9	1.3	2.4	NT	0.047	0.1	ND
Sulfate	mg/l	1.25 x bkgd	130	110	120	130	120	110	120	120	110	NT	110	130	130	67	74	26
Fluoride	mg/l		0.19	0.17	0.24	0.18	0.16	0.19	0.16	0.13	0.17	75	0.1	0.15	0.12	0.19	0.18	0.27
TDS	mg/l	1.25 x bkgd	652	624	NT	601	575	563	586	602	660	NT		621	NT	618	627	NT

Table 1

TR 31-5-697 Groundwater Analytical Results

Sample ID:		COGCC Table 910-1 Standards	MW 2	MW 2	MW 2	MW 2	MW 2	MW 2	MW 2	MW 2	MW 2	MW 2	MW 3	MW 3	MW 3	MW 3	MW 3	MW 3
Date Sampled:			9/18/2012	12/5/2012	3/27/2013	5/15/2013	7/11/2013	11/8/2013	5/29/2014	10/8/2014	6/1/2015	10/13/2015	10/19/2011	4/9/2012	7/12/2012	9/18/2012	12/5/2012	3/27/2013
Depth to Water (ft.)			28.35	30.75	28.21	26.64	29.48	30.48	25.97	28.43	24.59	27.72	33.38	33.02	NT	33.04	34.3	32.74
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		3.4	120	39	46	22	210	88	24	84	23	40	1.1	ND	1.5	2	69
GRO	mg/L		10	28	21	62	9.5	8.6	6.4	6.4	4.3	3.1	4.8	3	1.4	1.8	1.7	1.9
Benzene	ug/l	5 ug/l	63	110	150	60	37	54	60	21	44	13	55	25	8.1	4.4	ND	4.1
Ethylbenzene	ug/l	700 ug/l	84	590	190	120	61	40	68	50	29	20	97	95	28	12	7.1	12
Toluene	ug/l	560 ug/l	ND	36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	ug/l	1400 ug/l	1400	17,000	2,800	2,900	1,000	2,400	900	560	260	150	600	520	140	100	84	100
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		ND	230	22	42	29	NT	NT	NT	NT	NT	ND	ND	ND	ND	5.7	17
2-Chloronaphthalene	ug/l		ND	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ug/l		ND	600	52	110	77	NT	NT	NT	NT	ND	ND	ND	ND	ND	11	10
Acenaphthene	ug/l		ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7
Acenaphthylene	ug/l		ND	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
Anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ug/l		ND	ND	ND	ND	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ug/l		ND	ND	ND	ND	ND	ND	5.9	6.8	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/l		5.6	230	23	60	19	ND	14	7.5	12	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/l		ND	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
Pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis																		
Calcium	mg/l		46	59	78	99	79	86	82	NT	110	75	79	99	87	75	69	870
Iron	mg/l		0.098	0.2	0.12	0.29	0.37	0.71	0.28	NT	4.7	0.51	0.12	1.1	0.53	0.64	0.18	4
Magnesium	mg/l		29	30	39	50	41	46	43	NT	55	40	37	42	36	35	33	410
Manganese	mg/l		0.092	0.45	0.59	0.7	0.46	0.62	0.5	NT	0.71	0.44	1.7	3.2	1.9	0.61	2.5	6.1
Potassium	mg/l		0.66	0.98	1.2	1.5	1.3	1.2	1	NT	2.7	0.94	1.1	1.6	1.7	1	0.74	9.7
Sodium	mg/l		150	73	90	82	83	89	87	NT	95	78	89	130	81	59	52	73
General Chemistry																		
Bromide	mg/l		0.47	0.47	0.42	0.36	0.45	0.38	0.45	0.37	0.47	0.39	0.55	2.5	0.68	0.36	0.31	0.52
Chloride	mg/l	1.25 x bkgd	61	54	51	53	58	50	64	53	73	42	72	300	95	45	38	61
Nitrogen, Nitrate	mg/l		ND	ND	0.14	0.044	ND	NT	NT	NT	1.5	NT	ND	ND	ND	ND	ND	0.051
Nitrogen, Nitrite	mg/l		ND	ND	ND	ND	0.038	NT	NT	NT	1	NT	ND	ND	ND	ND	ND	ND
Nitrogen, Nitrate-Nitrite			ND	ND	0.14	0.044	0.038	NT	0.24	0.023	2.5	NT	ND	ND	ND	ND	ND	0.051
Sulfate	mg/l	1.25 x bkgd	35	28	24	41	50	37	NT	18	50	53	61	7.1	39	110	110	73
Fluoride	mg/l		0.21	0.2	0.18	0.16	0.14	0.16	NT	0.11	0.14	0.16	0.22	0.15	0.23	0.17	0.16	0.18
TDS	mg/l	1.25 x bkgd	640	607	605	601	721	820	NT		760	NT	640	1,190	NT	603	581	621

Table 1

TR 31-5-697 Groundwater Analytical Results



Sample ID:		COGCC Table 910-1 Standards	MW 3 5/15/2013	MW 3 7/11/2013	MW 3 11/8/2013	MW 3 5/29/2014	MW 3 10/8/2014	MW 3 6/1/2015	MW 3 10/13/2015	MW 4 10/19/2011	MW 4 4/9/2012	MW 4 7/12/2012	MW 4 9/18/2012	MW 4 12/5/2012	MW 4 3/27/2013	MW 4 5/15/2013	MW 4 7/11/2013	MW 4 11/8/2013
Date Sampled:																		
Depth to Water (ft.)			30.31	32.64	33.98	30.11	34.9	28.94	35.35	28.83	27.56	NT	32.74	33.02	32.36	31.01	32.48	32.72
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		7.6	5.4	13	2.4	7.9	36	3.9	3.1	0.9	7.3	0.87	1.3	1.4	1.3	0.65	ND
GRO	mg/L		1.4	1.6	1.2	1.6	1.4	3	0.89	4.7	2.3	1.6	1.1	0.34	0.9	0.72	0.92	0.27
Benzene	ug/l	5 ug/l	1.3	ND	5.4	5.1	23	38	8.2	67	17	27	16	9	2	13	14	ND
Ethylbenzene	ug/l	700 ug/l	8.6	3.9	ND	21	5.4	47	1	96	72	44	13	2.4	ND	14	15	ND
Toluene	ug/l	560 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	ug/l	1400 ug/l	29	22	3.6	80	3.2	590	5.7	470	160	130	44	7.8	3.2	56	69	ND
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		ND	ND	NT	NT	NT	NT	NT	6.6	ND	ND	ND	ND	ND	ND	ND	NT
2-Chloronaphthalene	ug/l		ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
2-Methylnaphthalene	ug/l		5.7	ND	NT	NT	NT	NT	ND	8.4	ND	ND	ND	ND	ND	ND	ND	NT
Acenaphthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/l		ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ug/l		ND	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Benzo(k)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/l		ND	ND	ND	ND	ND	5.2	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/l		ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis																		
Calcium	mg/l		110	83	87	160	NT	220	91	78	74	79	80	68	910	99	88	83
Iron	mg/l		0.22	ND	ND	1.1	NT	5.5	0.29	ND	ND	0.17	ND	0.091	1.1	0.17	ND	ND
Magnesium	mg/l		50	40	42	66	NT	87	45	37	34	35	34	31	430	47	41	40
Manganese	mg/l		1.4	0.68	0.68	3.4	NT	4.5	0.77	1.7	1.6	1.8	0.92	1.3	17	0.19	1.8	1.5
Potassium	mg/l		1.2	0.88	0.89	1.3	NT	3.1	0.84	1.1	0.84	0.98	0.79	0.77	9.1	1.2	0.91	0.84
Sodium	mg/l		88	61	72	170	NT	450	75	100	87	82	100	71	900	92	83	82
General Chemistry																		
Bromide	mg/l		1	0.37	0.56	4	0.85	7.6	0.48	0.47	0.84	0.38	0.48	0.45	0.55	0.59	0.5	0.47
Chloride	mg/l	1.25 x bkgd	130	51	68	500	99	950	63	63	75	64	61	52	62	84	68	58
Nitrogen, Nitrate	mg/l		0.023	ND	NT	NT	NT	0.082	NT	ND	ND	ND	ND	ND	0.05	ND	ND	NT
Nitrogen, Nitrite	mg/l		ND	0.032	NT	NT	NT	0.14	NT	ND	ND	ND	ND	ND	ND	ND	ND	NT
Nitrogen, Nitrate-Nitrite			0.023	0.032	NT	ND	ND	0.222	NT	ND	ND	ND	ND	ND	0.05	ND	ND	NT
Sulfate	mg/l	1.25 x bkgd	85	93	61	66	35	47	70	2.7	10	12	49	49	74	21	9.7	24
Fluoride	mg/l		0.14	0.11	0.14	ND	ND	ND	ND	0.2	0.18	0.23	0.16	0.16	0.18	0.14	0.11	0.15
TDS	mg/l	1.25 x bkgd	620	699	925	NT		2418	NT	623	689	NT	634	601	605	610	715	730

Table 1

TR 31-5-697 Groundwater Analytical Results



Sample ID:		COGCC Table 910-1 Standards	MW 4	MW 4	MW 4	MW 4	MW 5	MW 5	MW 5	MW 5	MW 5	MW 5	MW 6	MW 6	MW 6	MW 6	MW 6	MW 6
Date Sampled:			5/29/2014	10/8/2014	6/1/2015	10/13/2015	7/11/2013	11/8/2013	5/29/2014	10/8/2014	6/1/2015	10/13/2015	7/11/2013	11/8/2013	5/29/2014	10/8/2014	6/1/2015	10/13/2015
Depth to Water (ft.)			28.94	31.66	23.47	30.79	29.47	30.46	25.98	29.12	25.15	28.86	25.35	25.62	21.42	25.32	19.62	25.18
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		1.4	3.3	1.5	1.8	ND	ND	ND	3.0	ND	1.6	ND	ND	ND	1.7	ND	ND
GRO	mg/L		1.3	0.33	0.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/l	5 ug/l	9.9	4.9	2.3	4.5	ND	ND	ND	ND	ND	ND	1.5	ND	1.8	ND	ND	ND
Ethylbenzene	ug/l	700 ug/l	36	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/l	560 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	ug/l	1400 ug/l	99	ND	120	ND	ND	ND	ND	ND	ND	ND	18	ND	ND	ND	ND	ND
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		NT	NT	NT	NT	ND	NT	NT	NT	NT	NT	ND	NT	NT	NT	NT	NT
2-Chloronaphthalene	ug/l		NT	NT	NT	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND
2-Methylnaphthalene	ug/l		NT	NT	NT	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND
Acenaphthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/l		NT	NT	NT	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND
Anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ug/l		NT	NT	ND	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND
Benzo(k)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/l		NT	NT	ND	ND	ND	NT	NT	NT	NT	ND	ND	NT	NT	NT	NT	ND
Pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis																		
Calcium	mg/l		90	NT	100	90	63	61	61	65	71	63	76	73	74	76	68	80
Iron	mg/l		0.35	NT	0.2	0.16	ND	ND	ND	0.9	0.16	ND	0.12	ND	ND	1.5	0.11	ND
Magnesium	mg/l		44	NT	48	43	31	30	30	32	35	32	36	35	35	35	31	37
Manganese	mg/l		1.6	NT	0.9	1.3	31	0.064	0.052	0.036	0.055	0.056	0.77	0.77	0.091	0.7	0.012	0.079
Potassium	mg/l		0.81	NT	1.2	0.85	0.032	1.1	0.66	1.2	0.98	0.8	1	0.88	0.68	1.4	0.82	0.7
Sodium	mg/l		85	NT	110	73	69	80	71	80	81	76	76	83	65	70	64	65
General Chemistry																		
Bromide	mg/l		0.62	0.47	0.26	0.48	ND	0.18	0.22	0.27	ND	ND	0.31	0.34	0.32	0.34	ND	0.35
Chloride	mg/l	1.25 x bkgd	87	74	60	65	17	19	20	29	19	17	48	43	39	47	32	40
Nitrogen, Nitrate	mg/l		NT	NT	2.8	NT	ND	NT	NT	NT	ND	NT	ND	NT	NT	NT	3.1	NT
Nitrogen, Nitrite	mg/l		NT	NT	0.053	NT	ND	NT	NT	NT	ND	NT	ND	NT	NT	NT	ND	NT
Nitrogen, Nitrate-Nitrite			ND	ND	2.853	NT	ND	NT	ND	0.028	ND	NT	ND	NT	0.24	ND	3.1	NT
Sulfate	mg/l	1.25 x bkgd	23	43	58	69	110	110	110	100	110	110	53	53	63	71	56	83
Fluoride	mg/l		ND	ND	ND	ND	0.15	0.17	0.12	ND	0.15	0.15	0.11	0.15	0.11	ND	0.15	ND
TDS	mg/l	1.25 x bkgd	NT		763	NT	589	584	NT		535	NT	625	680	NT		493	NT

Table 1

TR 31-5-697 Groundwater Analytical Results



Sample ID:		COGCC Table 910-1 Standards	MW 7 7/11/2013	MW 7 11/8/2013	MW 7 5/29/2014	MW 7 10/8/2014	MW 7 6/1/2015	MW 7 10/13/2015	MW 8 11/8/2013	MW 8 5/29/2014	MW 8 10/8/2014	MW 8 6/1/2015	MW 8 10/13/2015	MW 9 11/8/2013	MW 9 5/29/2014	MW 9 10/8/2014	MW 9 6/1/2015	MW 9 10/13/2015
Date Sampled:																		
Depth to Water (ft.)			28.42	28.62	25.04	28.46	23.27	28.43	22.09	18.38	21.07	16.39	20.53	24.42	20.51	23.57	18.18	22.87
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		ND	ND	ND	1.5	ND	ND	1.5	ND	1.4	0.93	1.0	3.3	1.1	3.5	1.0	1.9
GRO	mg/L		ND	ND	ND	ND	ND	ND	1.4	0.44	0.24	1.7	1.5	11	0.55	3.8	0.21	1.2
Benzene	ug/l	5 ug/l	ND	ND	ND	ND	ND	ND	90	9.8	9.2	40	33	ND	ND	62	2.7	15
Ethylbenzene	ug/l	700 ug/l	ND	ND	ND	ND	ND	ND	16	6.2	2.0	24.0	19.0	ND	ND	51	1.5	20
Toluene	ug/l	560 ug/l	ND	ND	ND	ND	ND	ND	26	ND	ND	ND	ND	16	ND	ND	ND	ND
Xylene (total)	ug/l	1400 ug/l	ND	ND	ND	ND	ND	ND	150	83	25	500	180	1,800	8	700	26	180
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Chloronaphthalene	ug/l		ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND
2-Methylnaphthalene	ug/l		ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND
Acenaphthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/l		ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND
Anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ug/l		ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND
Benzo(k)fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30	30	6.1	ND	ND
Phenanthrene	ug/l		ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND	NT	NT	NT	NT	ND
Pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis																		
Calcium	mg/l		63	71	79	70	86	77	87	72	76	84	77	69	68	68	79	73
Iron	mg/l		ND	ND	ND	0.19	ND	ND	ND	0.11	3.5	2	ND	ND	ND	1.1	1.3	0.12
Magnesium	mg/l		31	36	39	34	42	38	45	37	38	43	40	36	35	35	41	39
Manganese	mg/l		0.032	0.51	0.39	0.5	0.47	0.42	1	0.032	0.23	0.33	0.39	0.42	0.056	0.44	0.13	0.26
Potassium	mg/l		1.2	0.79	0.91	0.86	1.1	0.8	1.3	0.86	2	1.8	0.84	2	0.8	1.5	1.4	0.85
Sodium	mg/l		69	82	85	78	89	79	82	59	65	75	80	100	59	130	66	84
General Chemistry																		
Bromide	mg/l		ND	0.2	0.44	0.35	0.39	0.22	0.44	0.31	0.41	0.31	0.49	0.58	0.27	1.1	0.24	0.43
Chloride	mg/l	1.25 x bkgd	17	37	55	44	56	33	51	46	56	56	58	70	37	140	45	58
Nitrogen, Nitrate	mg/l		ND	NT	NT	NT	0.15	NT	NT	NT	NT	1.3	NT	NT	NT	NT	1.7	NT
Nitrogen, Nitrite	mg/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	0.034	NT	NT	NT	NT	0.046	NT
Nitrogen, Nitrate-Nitrite			ND	NT	0.025	ND	0.15	NT	NT	1.2	1.0	1.334	NT	NT	ND	0.033	1.746	NT
Sulfate	mg/l	1.25 x bkgd	110	47	41	44	40	54	63	110	78	93	65	70	100	29	110	86
Fluoride	mg/l		0.15	0.14	ND	ND	0.12	ND	0.17	0.13	ND	0.15	0.13	0.27	0.13	0.11	0.15	0.11
TDS	mg/l	1.25 x bkgd	635	658	NT		648	NT	746	NT		618	NT	748	NT		567	NT

Table 2

## Field Data

[illegible]

Table 2

## Field Data

YSI 556 Field Parameters →→			Temperature	Conductivity	Conductivity	Resistivity	TDS	Salinity	Dissolved Oxygen (DO)	Dissolved Oxygen (DO)	pH	pH	ORP	Water Levels
Sample Location	Media	Sampling Date	°C	mS/cm²	mS/cm	Ω/cm	g/L		%	mg/L		mV		TOC (ft)
MW-3	Groundwater	9/18/2012	13.57	0.928	0.725	1378.90	0.603	0.46	4.50	0.47	7.67	-38.1	-148.80	33.04
MW-3	Groundwater	12/5/2012	7.65	0.894	0.513	1949.12	0.581	0.44	57.00	7.72	7.56	-57.3	32.40	34.30
MW-3	Groundwater	3/27/2013	6.36	0.897	0.525	1886.30	0.621	0.46	36.10	4.97	7.43	-61.7	-112.50	32.74
MW-3	Groundwater	5/15/2013	5.89	0.868	0.534	1786.45	0.620	0.47	31.23	2.95	7.49	-60.3	-107.30	30.31
MW-3	Groundwater	7/11/2013	10.10	1.073	0.768	1301.80	0.699	0.54	46.80	5.00	7.64	NT	-152.40	32.64
MW-3	Groundwater	11/8/2013	7.61	1.423	0.950	1052.60	0.925	0.72	NT	Nt	7.15	NT	-140.90	33.98
MW-3	Groundwater	5.29.2014	9.44	2.931	2.062	484.83	1.904	1.63	18.80	2.12	7.26	-26.7	-65.20	30.11
MW-3	Groundwater	10/8/2014	9.33	1.417	0.993	1006.90	0.921	0.71	26.60	3.04	7.54	-52.8	-162.20	34.90
MW-3	Groundwater	6/1/2015	9.69	3.721	2.633	379.88	2.418	1.97	9.40	1.06	7.19	-29.4	-40.10	28.94
MW-3	Groundwater	10/13/2015	9.42	1.052	0.739	1353.50	0.683	0.52	13.80	1.55	8.59	-78.5	-176.50	35.35
MW-4	Groundwater	10/19/2011	7.80	0.958	0.644	1554.20	0.623	0.47	25.10	2.95	9.09	-122.5	-146.20	28.83
MW-4	Groundwater	4/9/2012	10.35	1.06	0.76	1315.70	0.689	0.53	58.60	6.50	7.25	-55.7	-103.90	27.56
MW-4	Groundwater	7/12/2012												
MW-4	Groundwater	9/18/2012	9.84	0.975	0.693	1442.90	0.634	0.48	8.30	0.94	7.75	-41.8	-143.60	32.74
MW-4	Groundwater	12/5/2012	7.80	9.925	0.554	1805.60	0.601	0.45	23.90	3.12	7.71	-65.1	4.90	33.02
MW-4	Groundwater	3/27/2013	6.45	1.003	0.561	1801.90	0.605	0.46	36.31	4.61	7.64	-65.7	-97.30	32.36
MW-4	Groundwater	5/15/2013	5.74	0.978	0.578	1807.70	0.610	0.50	30.14	3.19	7.51	-64.1	-97.20	31.01
MW-4	Groundwater	7/11/2013	8.96	1.1	0.763	1309.20	0.715	0.55	31.70	3.62	7.63	NT	-108.60	32.48
MW-4	Groundwater	11/8/2013	7.08	1.122	0.738	1355.80	0.730	0.56	NT	Nt	7.24	NT	-43.80	32.72
MW-4	Groundwater	5/29/2014	8.72	1.198	0.824	1212.70	0.729	0.60	20.10	2.28	7.51	-40.0	12.03	28.94
MW-4	Groundwater	10/8/2014	8.37	1.144	0.781	1280.60	0.744	0.57	31.20	3.65	7.52	-51.6	-41.40	31.66
MW-4	Groundwater	6/1/2015	8.75	1.173	0.809	1236.00	0.763	0.59	152.70	17.89	7.04	-19.0	16.80	23.47
MW-4	Groundwater	10/13/2015	8.06	1.077	0.729	1372.40	0.700	0.54	11.50	1.35	8.06	-66.7	-70.00	30.79
MW-5	Groundwater	7.11.2013	10.35	0.91	0.697	1437.10	0.589	0.45	37.00	3.88	7.74	NT	107.50	29.47
MW-5	Groundwater	11/8/2013	7.58	0.897	0.6	1466.00	0.584	0.44	NT	NT	7.36	NT	143.10	30.46
MW-5	Groundwater	5/29/2014	9.38	0.949	0.666	1601.80	0.617	0.47	23.70	2.66	7.73	-32.1	190.30	25.98
MW-5	Groundwater	10/8/2014	8.87	0.945	0.654	1528.70	0.614	0.47	36.60	4.23	7.60	-55.6	-10.60	29.12
MW-5	Groundwater	6/1/2015	9.25	0.828	0.575	1738.40	0.535	0.41	45.50	5.21	7.09	-20.1	63.80	25.15
MW-5	Groundwater	10/13/2015	9.00	0.866	0.601	1663.50	0.582	0.43	13.00	1.50	6.71	-34.1	98.30	28.86

Table 2

## Field Data

YSI 556 Field Parameters →→			Temperature	Conductivity	Conductivity	Resistivity	TDS	Salinity	Dissolved Oxygen (DO)	Dissolved Oxygen (DO)	pH	pH	ORP	Water Levels
Sample Location	Media	Sampling Date	°C	mS/cm²	mS/cm	Ω/cm	g/L		%	mg/L		mV		TOC (ft)
MW-6	Groundwater	7/11/2013	8.81	0.959	0.67	1495.10	0.625	0.48	28.90	3.33	7.87	NT	-61.80	25.35
MW-6	Groundwater	11/8/2013	6.40	1.054	0.68	1475.60	0.686	0.52	NT	NT	7.50	NT	36.20	25.62
MW-6	Groundwater	5.29/2014	7.32	0.959	0.635	1573.10	0.624	0.48	26.70	3.18	7.75	-52.8	240.60	21.42
MW-6	Groundwater	10/8/2014	7.55	1.03	0.687	1456.50	0.669	0.51	39.40	4.71	7.66	-58.7	-13.50	25.32
MW-6	Groundwater	6/1/2015	8.09	0.759	0.514	1946.40	0.493	0.37	110.90	13.08	7.18	-22.3	89.20	19.62
MW-6	Groundwater	10/13/2015	7.48	0.919	0.611	1635.80	0.597	0.45	15.20	1.81	6.67	-33.2	-3.70	25.18
MW-7	Groundwater	7/11/2013	8.40	0.976	0.666	1500.40	0.635	0.48	30.70	3.58	7.86	NT	7.10	28.42
MW-7	Groundwater	11/8/2013	6.63	1.013	0.658	1520.70	0.658	0.50	NT	NT	7.66	NT	195.30	28.62
MW-7	Groundwater	5/29/2014	7.73	1.091	0.73	1370.60	0.708	0.54	26.40	3.11	7.76	-53.2	223.70	25.04
MW-7	Groundwater	10/8/2014	7.77	1.044	0.7	1427.70	0.679	0.52	25.30	3.00	7.64	-57.6	-33.90	28.46
MW-7	Groundwater	6/1/2015	8.72	0.997	0.687	1455.40	0.648	0.50	26.60	3.08	6.97	-17.4	88.30	23.27
MW-7	Groundwater	10/13/2015	7.35	0.926	0.614	1629.00	0.602	0.46	15.40	1.84	6.36	-25.9	22.30	28.43
MW-8	Groundwater	11/8/2013	9.28	1.136	0.796	1256.80	0.746	0.57	NT	NT	7.42	NT	-36.10	22.09
MW-8	Groundwater	5/29/2014	9.19	0.951	0.664	1506.10	0.618	0.47	31.70	3.60	7.62	-46.0	164.10	18.38
MW-8	Groundwater	10/8/2014	8.73	1.018	0.702	1424.90	0.662	0.51	37.90	4.40	7.45	-47.7	21.70	21.07
MW-8	Groundwater	6/1/2015	9.79	0.951	0.675	1482.40	0.618	0.47	32.30	3.65	6.69	-6.4	108.00	16.39
MW-8	Groundwater	10/13/2015	8.81	1.024	0.707	1414.00	0.665	0.44	13.40	1.55	7.15	-44.5	-86.00	20.53
MW-9	Groundwater	11/8/2013	8.25	1.151	0.783	1276.20	0.748	0.57	NT	NT	7.58	NT	16.50	24.42
MW-9	Groundwater	5/29/2014	8.86	0.902	0.624	1601.4	0.587	0.45	19.2	2.2	7.79	-55.2	-137.7	20.51
MW-9	Groundwater	10/8/2014	8.29	1.335	0.909	1100.1	0.868	0.67	33.8	3.96	7.74	-63	-158.4	23.57
MW-9	Groundwater	6/1/2015	8.61	0.872	0.599	1668.4	0.567	0.43	56	6.52	7.07	-19.8	79	18.18
MW-9	Groundwater	10/13/2015	8.59	0.993	0.681	1467.4	0.645	0.49	14.5	1.69	8.12	-90.9	-219.1	22.87



22-Oct-2015

Mark Mumby  
HRL Compliance Solutions, Inc  
2385 F 1/2 Road  
Grand Junction, CO 81505

Re: **WPX TR 51-5-397 Quarterly GW Monitoring**

Work Order: **15101005**

Dear Mark,

ALS Environmental received 10 samples on 15-Oct-2015 02:15 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 41.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Les Arnold".

Electronically approved by: Chad Whelton

Les Arnold  
Senior Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental The ALS logo, a stylized 'A' with a flame inside a triangle.

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Work Order:** 15101005

**Work Order Sample Summary**

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
15101005-01	MW-1	Water		10/13/2015 10:30	10/15/2015 14:15	<input type="checkbox"/>
15101005-02	MW-2	Water		10/13/2015 13:25	10/15/2015 14:15	<input type="checkbox"/>
15101005-03	MW-3	Water		10/13/2015 11:58	10/15/2015 14:15	<input type="checkbox"/>
15101005-04	MW-4	Water		10/13/2015 11:35	10/15/2015 14:15	<input type="checkbox"/>
15101005-05	MW-5	Water		10/13/2015 12:21	10/15/2015 14:15	<input type="checkbox"/>
15101005-06	MW-6	Water		10/13/2015 10:52	10/15/2015 14:15	<input type="checkbox"/>
15101005-07	MW-7	Water		10/13/2015 11:05	10/15/2015 14:15	<input type="checkbox"/>
15101005-08	MW-8	Water		10/13/2015 12:41	10/15/2015 14:15	<input type="checkbox"/>
15101005-09	MW-9	Water		10/13/2015 13:04	10/15/2015 14:15	<input type="checkbox"/>
15101005-10	Trip Blank	Water		10/13/2015	10/15/2015 14:15	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Work Order:** 15101005

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**Case Narrative**

Batch 77637, Method PNLVI\_8270\_W, Samples 15101005-02B and -08B: SVOC surrogate recoveries high due to matrix interference.

Batch R174110, Method VOC\_8260\_W, Sample 15101005-02A: VOC surrogate recovery high due to matrix interference.

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**WorkOrder:** 15101005

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<b><u>Acronym</u></b>	<b><u>Description</u></b>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-1  
**Collection Date:** 10/13/2015 10:30 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-01  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	10/19/2015 07:41 PM
Surr: 4-Terphenyl-d14	92.4		31-176	%REC	1	10/19/2015 07:41 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>			<b>SW8015D</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	10/15/2015 08:18 PM
Surr: Toluene-d8	105		70-130	%REC	1	10/15/2015 08:18 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
Calcium	87		5.0	mg/L	10	10/19/2015 04:53 PM
Iron	ND		0.080	mg/L	1	10/20/2015 10:39 AM
Magnesium	44		2.0	mg/L	10	10/19/2015 04:53 PM
Manganese	ND		0.0050	mg/L	1	10/20/2015 10:39 AM
Potassium	0.77		0.20	mg/L	1	10/20/2015 10:39 AM
Sodium	64		2.0	mg/L	10	10/19/2015 04:53 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
2-Methylnaphthalene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Acenaphthene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Acenaphthylene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Anthracene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Benzo(a)anthracene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Benzo(a)pyrene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Chrysene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Fluoranthene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Fluorene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Naphthalene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Phenanthrene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Pyrene	ND		5.0	µg/L	1	10/19/2015 10:59 PM
Surr: 2-Fluorobiphenyl	96.4		20-140	%REC	1	10/19/2015 10:59 PM
Surr: 4-Terphenyl-d14	89.5		22-172	%REC	1	10/19/2015 10:59 PM
Surr: Nitrobenzene-d5	77.2		8-140	%REC	1	10/19/2015 10:59 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>LSY</b>
Benzene	ND		1.0	µg/L	1	10/17/2015 06:36 PM
Ethylbenzene	ND		1.0	µg/L	1	10/17/2015 06:36 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-1  
**Collection Date:** 10/13/2015 10:30 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-01  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		2.0	µg/L	1	10/17/2015 06:36 PM
o-Xylene	ND		1.0	µg/L	1	10/17/2015 06:36 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 06:36 PM
Xylenes, Total	ND		3.0	µg/L	1	10/17/2015 06:36 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	10/17/2015 06:36 PM
Surr: 4-Bromofluorobenzene	97.3		80-110	%REC	1	10/17/2015 06:36 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	10/17/2015 06:36 PM
Surr: Toluene-d8	97.1		85-110	%REC	1	10/17/2015 06:36 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>		Analyst: <b>EE</b>	
<b>Bromide</b>	<b>0.41</b>		<b>0.20</b>	<b>mg/L</b>	1	10/21/2015 11:09 AM
<b>Chloride</b>	<b>58</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 11:29 AM
<b>Fluoride</b>	<b>0.12</b>		<b>0.10</b>	<b>mg/L</b>	1	10/21/2015 11:09 AM
<b>Sulfate</b>	<b>130</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 11:29 AM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-2  
**Collection Date:** 10/13/2015 01:25 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-02  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>23</b>		<b>0.10</b>	<b>mg/L</b>	1	10/19/2015 08:11 PM
Surr: 4-Terphenyl-d14	79.1		31-176	%REC	1	10/19/2015 08:11 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>3.1</b>		<b>0.20</b>	<b>mg/L</b>	1	10/16/2015 07:12 AM
Surr: Toluene-d8	107		70-130	%REC	1	10/16/2015 07:12 AM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>75</b>		<b>5.0</b>	<b>mg/L</b>	10	10/19/2015 05:09 PM
<b>Iron</b>	<b>0.51</b>		<b>0.080</b>	<b>mg/L</b>	1	10/20/2015 10:45 AM
<b>Magnesium</b>	<b>40</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:09 PM
<b>Manganese</b>	<b>0.44</b>		<b>0.050</b>	<b>mg/L</b>	10	10/19/2015 05:09 PM
<b>Potassium</b>	<b>0.94</b>		<b>0.20</b>	<b>mg/L</b>	1	10/20/2015 10:45 AM
<b>Sodium</b>	<b>78</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:09 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
2-Methylnaphthalene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Acenaphthene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Acenaphthylene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Anthracene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Benzo(a)anthracene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Benzo(a)pyrene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Chrysene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Fluoranthene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Fluorene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Naphthalene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Phenanthrene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Pyrene	ND		5.0	µg/L	1	10/19/2015 11:49 PM
Surr: 2-Fluorobiphenyl	101		20-140	%REC	1	10/19/2015 11:49 PM
Surr: 4-Terphenyl-d14	68.8		22-172	%REC	1	10/19/2015 11:49 PM
Surr: Nitrobenzene-d5	192	S	8-140	%REC	1	10/19/2015 11:49 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260B</b>			Analyst: <b>LSY</b>
<b>Benzene</b>	<b>13</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 07:00 PM
<b>Ethylbenzene</b>	<b>20</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 07:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-2  
**Collection Date:** 10/13/2015 01:25 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-02  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>m,p-Xylene</b>	<b>150</b>		<b>2.0</b>	<b>µg/L</b>	<b>1</b>	10/17/2015 07:00 PM
<b>o-Xylene</b>	<b>3.7</b>		<b>1.0</b>	<b>µg/L</b>	<b>1</b>	10/17/2015 07:00 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 07:00 PM
<b>Xylenes, Total</b>	<b>150</b>		<b>3.0</b>	<b>µg/L</b>	<b>1</b>	10/17/2015 07:00 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	10/17/2015 07:00 PM
Surr: 4-Bromofluorobenzene	107		80-110	%REC	1	10/17/2015 07:00 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	10/17/2015 07:00 PM
Surr: Toluene-d8	130	S	85-110	%REC	1	10/17/2015 07:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: <b>EE</b>
<b>Bromide</b>	<b>0.39</b>		<b>0.20</b>	<b>mg/L</b>	<b>1</b>	10/21/2015 11:50 AM
<b>Chloride</b>	<b>42</b>		<b>10</b>	<b>mg/L</b>	<b>10</b>	10/21/2015 12:10 PM
<b>Fluoride</b>	<b>0.16</b>		<b>0.10</b>	<b>mg/L</b>	<b>1</b>	10/21/2015 11:50 AM
<b>Sulfate</b>	<b>53</b>		<b>10</b>	<b>mg/L</b>	<b>10</b>	10/21/2015 12:10 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-3  
**Collection Date:** 10/13/2015 11:58 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-03  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>3.9</b>		<b>0.10</b>	<b>mg/L</b>	1	10/19/2015 08:41 PM
Surr: 4-Terphenyl-d14	99.6		31-176	%REC	1	10/19/2015 08:41 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>0.89</b>		<b>0.20</b>	<b>mg/L</b>	1	10/16/2015 07:38 AM
Surr: Toluene-d8	95.3		70-130	%REC	1	10/16/2015 07:38 AM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>91</b>		<b>5.0</b>	<b>mg/L</b>	10	10/19/2015 05:15 PM
<b>Iron</b>	<b>0.29</b>		<b>0.080</b>	<b>mg/L</b>	1	10/20/2015 10:50 AM
<b>Magnesium</b>	<b>45</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:15 PM
<b>Manganese</b>	<b>0.77</b>		<b>0.050</b>	<b>mg/L</b>	10	10/19/2015 05:15 PM
<b>Potassium</b>	<b>0.84</b>		<b>0.20</b>	<b>mg/L</b>	1	10/20/2015 10:50 AM
<b>Sodium</b>	<b>75</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:15 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
2-Methylnaphthalene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Acenaphthene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Acenaphthylene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Anthracene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Benzo(a)anthracene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Benzo(a)pyrene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Chrysene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Fluoranthene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Fluorene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Naphthalene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Phenanthrene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Pyrene	ND		5.0	µg/L	1	10/20/2015 12:14 PM
Surr: 2-Fluorobiphenyl	65.1		20-140	%REC	1	10/20/2015 12:14 PM
Surr: 4-Terphenyl-d14	42.5		22-172	%REC	1	10/20/2015 12:14 PM
Surr: Nitrobenzene-d5	75.8		8-140	%REC	1	10/20/2015 12:14 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260B</b>			Analyst: <b>LSY</b>
<b>Benzene</b>	<b>8.2</b>		<b>1.0</b>	<b>µg/L</b>	1	10/20/2015 03:09 AM
<b>Ethylbenzene</b>	<b>1.0</b>		<b>1.0</b>	<b>µg/L</b>	1	10/20/2015 03:09 AM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-3  
**Collection Date:** 10/13/2015 11:58 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-03  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>m,p-Xylene</b>	<b>5.7</b>		<b>2.0</b>	<b>µg/L</b>	1	10/20/2015 03:09 AM
o-Xylene	ND		1.0	µg/L	1	10/20/2015 03:09 AM
Toluene	ND		1.0	µg/L	1	10/20/2015 03:09 AM
<b>Xylenes, Total</b>	<b>5.7</b>		<b>3.0</b>	<b>µg/L</b>	1	10/20/2015 03:09 AM
Surr: 1,2-Dichloroethane-d4	99.8		75-120	%REC	1	10/20/2015 03:09 AM
Surr: 4-Bromofluorobenzene	107		80-110	%REC	1	10/20/2015 03:09 AM
Surr: Dibromofluoromethane	99.6		85-115	%REC	1	10/20/2015 03:09 AM
Surr: Toluene-d8	108		85-110	%REC	1	10/20/2015 03:09 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: <b>EE</b>
<b>Bromide</b>	<b>0.48</b>		<b>0.20</b>	<b>mg/L</b>	1	10/21/2015 12:30 PM
<b>Chloride</b>	<b>63</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 12:50 PM
Fluoride	ND		0.10	mg/L	1	10/21/2015 12:30 PM
<b>Sulfate</b>	<b>70</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 12:50 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-4  
**Collection Date:** 10/13/2015 11:35 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-04  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>1.8</b>		<b>0.10</b>	<b>mg/L</b>	1	10/19/2015 09:11 PM
Surr: 4-Terphenyl-d14	107		31-176	%REC	1	10/19/2015 09:11 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	10/16/2015 08:03 AM
Surr: Toluene-d8	98.6		70-130	%REC	1	10/16/2015 08:03 AM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>90</b>		<b>5.0</b>	<b>mg/L</b>	10	10/19/2015 05:20 PM
<b>Iron</b>	<b>0.16</b>		<b>0.080</b>	<b>mg/L</b>	1	10/20/2015 10:56 AM
<b>Magnesium</b>	<b>43</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:20 PM
<b>Manganese</b>	<b>1.3</b>		<b>0.050</b>	<b>mg/L</b>	10	10/19/2015 05:20 PM
<b>Potassium</b>	<b>0.85</b>		<b>0.20</b>	<b>mg/L</b>	1	10/20/2015 10:56 AM
<b>Sodium</b>	<b>73</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:20 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
2-Methylnaphthalene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Acenaphthene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Acenaphthylene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Anthracene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Benzo(a)anthracene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Benzo(a)pyrene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Chrysene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Fluoranthene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Fluorene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Naphthalene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Phenanthrene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Pyrene	ND		5.0	µg/L	1	10/20/2015 12:39 PM
Surr: 2-Fluorobiphenyl	83.0		20-140	%REC	1	10/20/2015 12:39 PM
Surr: 4-Terphenyl-d14	92.5		22-172	%REC	1	10/20/2015 12:39 PM
Surr: Nitrobenzene-d5	86.9		8-140	%REC	1	10/20/2015 12:39 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260B</b>			Analyst: <b>LSY</b>
<b>Benzene</b>	<b>4.5</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 07:48 PM
Ethylbenzene	ND		1.0	µg/L	1	10/17/2015 07:48 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-4  
**Collection Date:** 10/13/2015 11:35 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-04  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		2.0	µg/L	1	10/17/2015 07:48 PM
o-Xylene	ND		1.0	µg/L	1	10/17/2015 07:48 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 07:48 PM
Xylenes, Total	ND		3.0	µg/L	1	10/17/2015 07:48 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	10/17/2015 07:48 PM
Surr: 4-Bromofluorobenzene	101		80-110	%REC	1	10/17/2015 07:48 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	10/17/2015 07:48 PM
Surr: Toluene-d8	96.4		85-110	%REC	1	10/17/2015 07:48 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: EE
<b>Bromide</b>	<b>0.48</b>		<b>0.20</b>	<b>mg/L</b>	1	10/21/2015 01:11 PM
<b>Chloride</b>	<b>65</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 01:31 PM
Fluoride	ND		0.10	mg/L	1	10/21/2015 01:11 PM
<b>Sulfate</b>	<b>69</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 01:31 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-5  
**Collection Date:** 10/13/2015 12:21 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-05  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>1.6</b>		<b>0.15</b>	<b>mg/L</b>	<b>1</b>	10/19/2015 09:41 PM
Surr: 4-Terphenyl-d14	104		31-176	%REC	1	10/19/2015 09:41 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>			<b>SW8015D</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>0.20</b>	<b>mg/L</b>	<b>1</b>	10/16/2015 08:28 AM
Surr: Toluene-d8	106		70-130	%REC	1	10/16/2015 08:28 AM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>63</b>		<b>5.0</b>	<b>mg/L</b>	<b>10</b>	10/19/2015 05:26 PM
Iron	ND		0.080	mg/L	1	10/20/2015 11:01 AM
<b>Magnesium</b>	<b>32</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	10/19/2015 05:26 PM
<b>Manganese</b>	<b>0.056</b>		<b>0.050</b>	<b>mg/L</b>	<b>10</b>	10/19/2015 05:26 PM
<b>Potassium</b>	<b>0.80</b>		<b>0.20</b>	<b>mg/L</b>	<b>1</b>	10/20/2015 11:01 AM
<b>Sodium</b>	<b>76</b>		<b>2.0</b>	<b>mg/L</b>	<b>10</b>	10/19/2015 05:26 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
2-Methylnaphthalene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Acenaphthene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Acenaphthylene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Anthracene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Benzo(a)anthracene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Benzo(a)pyrene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Benzo(b)fluoranthene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Benzo(g,h,i)perylene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Benzo(k)fluoranthene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Chrysene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Dibenzo(a,h)anthracene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Fluoranthene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Fluorene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Naphthalene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Phenanthrene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Pyrene	ND		7.5	µg/L	1	10/20/2015 01:04 AM
Surr: 2-Fluorobiphenyl	88.9		20-140	%REC	1	10/20/2015 01:04 AM
Surr: 4-Terphenyl-d14	84.6		22-172	%REC	1	10/20/2015 01:04 AM
Surr: Nitrobenzene-d5	72.5		8-140	%REC	1	10/20/2015 01:04 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>LSY</b>
<b>Benzene</b>	<b>ND</b>		<b>1.0</b>	<b>µg/L</b>	<b>1</b>	10/17/2015 08:12 PM
<b>Ethylbenzene</b>	<b>ND</b>		<b>1.0</b>	<b>µg/L</b>	<b>1</b>	10/17/2015 08:12 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp****Date:** 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-5  
**Collection Date:** 10/13/2015 12:21 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-05  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		2.0	µg/L	1	10/17/2015 08:12 PM
o-Xylene	ND		1.0	µg/L	1	10/17/2015 08:12 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 08:12 PM
Xylenes, Total	ND		3.0	µg/L	1	10/17/2015 08:12 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	1	10/17/2015 08:12 PM
Surr: 4-Bromofluorobenzene	98.9		80-110	%REC	1	10/17/2015 08:12 PM
Surr: Dibromofluoromethane	105		85-115	%REC	1	10/17/2015 08:12 PM
Surr: Toluene-d8	99.4		85-110	%REC	1	10/17/2015 08:12 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: <b>EE</b>
Bromide	ND		0.20	mg/L	1	10/21/2015 03:12 PM
<b>Chloride</b>	<b>17</b>		<b>1.0</b>	<b>mg/L</b>	1	10/21/2015 03:12 PM
<b>Fluoride</b>	<b>0.15</b>		<b>0.10</b>	<b>mg/L</b>	1	10/21/2015 03:12 PM
<b>Sulfate</b>	<b>110</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 03:32 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-6  
**Collection Date:** 10/13/2015 10:52 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-06  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	10/19/2015 10:11 PM
Surr: 4-Terphenyl-d14	117		31-176	%REC	1	10/19/2015 10:11 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>			<b>SW8015D</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	10/16/2015 08:53 AM
Surr: Toluene-d8	106		70-130	%REC	1	10/16/2015 08:53 AM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
Calcium	80		5.0	mg/L	10	10/19/2015 05:31 PM
Iron	ND		0.080	mg/L	1	10/20/2015 11:07 AM
Magnesium	37		2.0	mg/L	10	10/19/2015 05:31 PM
Manganese	0.079		0.050	mg/L	10	10/19/2015 05:31 PM
Potassium	0.70		0.20	mg/L	1	10/20/2015 11:07 AM
Sodium	65		2.0	mg/L	10	10/19/2015 05:31 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
2-Methylnaphthalene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Acenaphthene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Acenaphthylene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Anthracene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Benzo(a)anthracene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Benzo(a)pyrene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Chrysene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Fluoranthene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Fluorene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Naphthalene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Phenanthrene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Pyrene	ND		5.0	µg/L	1	10/20/2015 01:29 AM
Surr: 2-Fluorobiphenyl	112		20-140	%REC	1	10/20/2015 01:29 AM
Surr: 4-Terphenyl-d14	97.9		22-172	%REC	1	10/20/2015 01:29 AM
Surr: Nitrobenzene-d5	82.8		8-140	%REC	1	10/20/2015 01:29 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>LSY</b>
Benzene	ND		1.0	µg/L	1	10/17/2015 08:37 PM
Ethylbenzene	ND		1.0	µg/L	1	10/17/2015 08:37 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-6  
**Collection Date:** 10/13/2015 10:52 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-06  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		2.0	µg/L	1	10/17/2015 08:37 PM
o-Xylene	ND		1.0	µg/L	1	10/17/2015 08:37 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 08:37 PM
Xylenes, Total	ND		3.0	µg/L	1	10/17/2015 08:37 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	1	10/17/2015 08:37 PM
Surr: 4-Bromofluorobenzene	97.2		80-110	%REC	1	10/17/2015 08:37 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	10/17/2015 08:37 PM
Surr: Toluene-d8	98.0		85-110	%REC	1	10/17/2015 08:37 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: <b>EE</b>
<b>Bromide</b>	<b>0.35</b>		<b>0.20</b>	<b>mg/L</b>	1	10/21/2015 03:52 PM
<b>Chloride</b>	<b>40</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 04:13 PM
Fluoride	ND		0.10	mg/L	1	10/21/2015 03:52 PM
<b>Sulfate</b>	<b>83</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 04:13 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-7  
**Collection Date:** 10/13/2015 11:05 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-07  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	10/19/2015 10:40 PM
Surr: 4-Terphenyl-d14	56.1		31-176	%REC	1	10/19/2015 10:40 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>			<b>SW8015D</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	10/16/2015 09:18 AM
Surr: Toluene-d8	106		70-130	%REC	1	10/16/2015 09:18 AM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
Calcium	77		5.0	mg/L	10	10/19/2015 05:53 PM
Iron	ND		0.080	mg/L	1	10/20/2015 11:12 AM
Magnesium	38		2.0	mg/L	10	10/19/2015 05:53 PM
Manganese	0.42		0.050	mg/L	10	10/19/2015 05:53 PM
Potassium	0.70		0.20	mg/L	1	10/20/2015 11:12 AM
Sodium	79		2.0	mg/L	10	10/19/2015 05:53 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
2-Methylnaphthalene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Acenaphthene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Acenaphthylene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Anthracene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Benzo(a)anthracene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Benzo(a)pyrene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Chrysene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Fluoranthene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Fluorene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Naphthalene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Phenanthrene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Pyrene	ND		5.0	µg/L	1	10/20/2015 01:53 AM
Surr: 2-Fluorobiphenyl	67.7		20-140	%REC	1	10/20/2015 01:53 AM
Surr: 4-Terphenyl-d14	53.0		22-172	%REC	1	10/20/2015 01:53 AM
Surr: Nitrobenzene-d5	49.3		8-140	%REC	1	10/20/2015 01:53 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>LSY</b>
Benzene	ND		1.0	µg/L	1	10/17/2015 09:01 PM
Ethylbenzene	ND		1.0	µg/L	1	10/17/2015 09:01 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp****Date:** 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-7  
**Collection Date:** 10/13/2015 11:05 AM

**Work Order:** 15101005  
**Lab ID:** 15101005-07  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
m,p-Xylene	ND		2.0	µg/L	1	10/17/2015 09:01 PM
o-Xylene	ND		1.0	µg/L	1	10/17/2015 09:01 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 09:01 PM
Xylenes, Total	ND		3.0	µg/L	1	10/17/2015 09:01 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	1	10/17/2015 09:01 PM
Surr: 4-Bromofluorobenzene	98.5		80-110	%REC	1	10/17/2015 09:01 PM
Surr: Dibromofluoromethane	105		85-115	%REC	1	10/17/2015 09:01 PM
Surr: Toluene-d8	97.0		85-110	%REC	1	10/17/2015 09:01 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: <b>EE</b>
<b>Bromide</b>	<b>0.22</b>		<b>0.20</b>	<b>mg/L</b>	1	10/21/2015 04:33 PM
<b>Chloride</b>	<b>33</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 04:53 PM
Fluoride	ND		0.10	mg/L	1	10/21/2015 04:33 PM
<b>Sulfate</b>	<b>54</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 04:53 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-8  
**Collection Date:** 10/13/2015 12:41 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-08  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>1.0</b>		<b>0.10</b>	<b>mg/L</b>	1	10/19/2015 11:10 PM
Surr: 4-Terphenyl-d14	51.3		31-176	%REC	1	10/19/2015 11:10 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>1.5</b>		<b>0.20</b>	<b>mg/L</b>	1	10/16/2015 08:14 PM
Surr: Toluene-d8	103		70-130	%REC	1	10/16/2015 08:14 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>77</b>		<b>5.0</b>	<b>mg/L</b>	10	10/19/2015 05:59 PM
Iron	ND		0.080	mg/L	1	10/20/2015 11:18 AM
<b>Magnesium</b>	<b>40</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:59 PM
<b>Manganese</b>	<b>0.39</b>		<b>0.050</b>	<b>mg/L</b>	10	10/19/2015 05:59 PM
<b>Potassium</b>	<b>0.84</b>		<b>0.20</b>	<b>mg/L</b>	1	10/20/2015 11:18 AM
<b>Sodium</b>	<b>80</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 05:59 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
2-Methylnaphthalene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Acenaphthene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Acenaphthylene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Anthracene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Benzo(a)anthracene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Benzo(a)pyrene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Chrysene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Fluoranthene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Fluorene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Naphthalene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Phenanthrene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Pyrene	ND		5.0	µg/L	1	10/20/2015 02:18 AM
Surr: 2-Fluorobiphenyl	44.2		20-140	%REC	1	10/20/2015 02:18 AM
Surr: 4-Terphenyl-d14	18.9	S	22-172	%REC	1	10/20/2015 02:18 AM
Surr: Nitrobenzene-d5	47.6		8-140	%REC	1	10/20/2015 02:18 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260B</b>			Analyst: <b>LSY</b>
<b>Benzene</b>	<b>33</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 09:25 PM
<b>Ethylbenzene</b>	<b>19</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 09:25 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-8  
**Collection Date:** 10/13/2015 12:41 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-08  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>m,p-Xylene</b>	<b>170</b>		<b>20</b>	<b>µg/L</b>	10	10/20/2015 10:22 AM
<b>o-Xylene</b>	<b>4.1</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 09:25 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 09:25 PM
<b>Xylenes, Total</b>	<b>180</b>		<b>30</b>	<b>µg/L</b>	10	10/20/2015 10:22 AM
Surr: 1,2-Dichloroethane-d4	105		75-120	%REC	1	10/17/2015 09:25 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	10	10/20/2015 10:22 AM
Surr: 4-Bromofluorobenzene	99.8		80-110	%REC	1	10/17/2015 09:25 PM
Surr: 4-Bromofluorobenzene	97.6		80-110	%REC	10	10/20/2015 10:22 AM
Surr: Dibromofluoromethane	102		85-115	%REC	1	10/17/2015 09:25 PM
Surr: Dibromofluoromethane	95.3		85-115	%REC	10	10/20/2015 10:22 AM
Surr: Toluene-d8	102		85-110	%REC	10	10/20/2015 10:22 AM
Surr: Toluene-d8	101		85-110	%REC	1	10/17/2015 09:25 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: <b>EE</b>
<b>Bromide</b>	<b>0.49</b>		<b>0.20</b>	<b>mg/L</b>	1	10/21/2015 05:13 PM
<b>Chloride</b>	<b>58</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 05:34 PM
<b>Fluoride</b>	<b>0.13</b>		<b>0.10</b>	<b>mg/L</b>	1	10/21/2015 05:13 PM
<b>Sulfate</b>	<b>65</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 05:34 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-9  
**Collection Date:** 10/13/2015 01:04 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-09  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>			<b>SW8015C</b>		Prep: SW3511 / 10/19/15	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>1.9</b>		<b>0.15</b>	<b>mg/L</b>	1	10/19/2015 11:40 PM
Surr: 4-Terphenyl-d14	85.2		31-176	%REC	1	10/19/2015 11:40 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>			<b>SW8015D</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>1.2</b>		<b>0.20</b>	<b>mg/L</b>	1	10/16/2015 08:39 PM
Surr: Toluene-d8	104		70-130	%REC	1	10/16/2015 08:39 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>			<b>SW846 6010C</b>		Prep: FILTER / 10/16/15	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>73</b>		<b>5.0</b>	<b>mg/L</b>	10	10/19/2015 06:04 PM
<b>Iron</b>	<b>0.12</b>		<b>0.080</b>	<b>mg/L</b>	1	10/20/2015 11:23 AM
<b>Magnesium</b>	<b>39</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 06:04 PM
<b>Manganese</b>	<b>0.26</b>		<b>0.050</b>	<b>mg/L</b>	10	10/19/2015 06:04 PM
<b>Potassium</b>	<b>0.85</b>		<b>0.20</b>	<b>mg/L</b>	1	10/20/2015 11:23 AM
<b>Sodium</b>	<b>84</b>		<b>2.0</b>	<b>mg/L</b>	10	10/19/2015 06:04 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>			<b>SW846 8270D</b>		Prep: SW3511 / 10/19/15	Analyst: <b>RM</b>
2-Chloronaphthalene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
2-Methylnaphthalene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Acenaphthene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Acenaphthylene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Anthracene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Benzo(a)anthracene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Benzo(a)pyrene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Benzo(b)fluoranthene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Benzo(g,h,i)perylene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Benzo(k)fluoranthene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Chrysene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Dibenzo(a,h)anthracene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Fluoranthene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Fluorene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Naphthalene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Phenanthrene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Pyrene	ND		7.5	µg/L	1	10/20/2015 02:43 AM
Surr: 2-Fluorobiphenyl	88.9		20-140	%REC	1	10/20/2015 02:43 AM
Surr: 4-Terphenyl-d14	68.2		22-172	%REC	1	10/20/2015 02:43 AM
Surr: Nitrobenzene-d5	83.3		8-140	%REC	1	10/20/2015 02:43 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>LSY</b>
<b>Benzene</b>	<b>15</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 09:49 PM
<b>Ethylbenzene</b>	<b>20</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 09:49 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** MW-9  
**Collection Date:** 10/13/2015 01:04 PM

**Work Order:** 15101005  
**Lab ID:** 15101005-09  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>m,p-Xylene</b>	<b>170</b>		<b>10</b>	<b>µg/L</b>	5	10/20/2015 10:46 AM
<b>o-Xylene</b>	<b>6.3</b>		<b>1.0</b>	<b>µg/L</b>	1	10/17/2015 09:49 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 09:49 PM
<b>Xylenes, Total</b>	<b>180</b>		<b>15</b>	<b>µg/L</b>	5	10/20/2015 10:46 AM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	1	10/17/2015 09:49 PM
Surr: 1,2-Dichloroethane-d4	104		75-120	%REC	5	10/20/2015 10:46 AM
Surr: 4-Bromofluorobenzene	104		80-110	%REC	1	10/17/2015 09:49 PM
Surr: 4-Bromofluorobenzene	97.8		80-110	%REC	5	10/20/2015 10:46 AM
Surr: Dibromofluoromethane	103		85-115	%REC	1	10/17/2015 09:49 PM
Surr: Dibromofluoromethane	103		85-115	%REC	5	10/20/2015 10:46 AM
Surr: Toluene-d8	101		85-110	%REC	5	10/20/2015 10:46 AM
Surr: Toluene-d8	99.8		85-110	%REC	1	10/17/2015 09:49 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056A</b>			Analyst: <b>EE</b>
<b>Bromide</b>	<b>0.43</b>		<b>0.20</b>	<b>mg/L</b>	1	10/21/2015 05:54 PM
<b>Chloride</b>	<b>58</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 06:14 PM
<b>Fluoride</b>	<b>0.11</b>		<b>0.10</b>	<b>mg/L</b>	1	10/21/2015 05:54 PM
<b>Sulfate</b>	<b>86</b>		<b>10</b>	<b>mg/L</b>	10	10/21/2015 06:14 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp****Date:** 22-Oct-15

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring  
**Sample ID:** Trip Blank  
**Collection Date:** 10/13/2015

**Work Order:** 15101005  
**Lab ID:** 15101005-10  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>LSY</b>
Benzene	ND		1.0	µg/L	1	10/17/2015 05:00 PM
Ethylbenzene	ND		1.0	µg/L	1	10/17/2015 05:00 PM
m,p-Xylene	ND		2.0	µg/L	1	10/17/2015 05:00 PM
o-Xylene	ND		1.0	µg/L	1	10/17/2015 05:00 PM
Toluene	ND		1.0	µg/L	1	10/17/2015 05:00 PM
Xylenes, Total	ND		3.0	µg/L	1	10/17/2015 05:00 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	10/17/2015 05:00 PM
Surr: 4-Bromofluorobenzene	98.4		80-110	%REC	1	10/17/2015 05:00 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	10/17/2015 05:00 PM
Surr: Toluene-d8	98.4		85-110	%REC	1	10/17/2015 05:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

Client: HRL Compliance Solutions, Inc

## QC BATCH REPORT

Work Order: 15101005

Project: WPX TR 51-5-397 Quarterly GW Monitoring

Batch ID: 77638

Instrument ID GC8

Method: SW8015C

<b>MBLK</b>		Sample ID: <b>DBLKW1-77638-77638</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 05:12 PM</b>		
Client ID:		Run ID: <b>GC8_151019B</b>				SeqNo: <b>3518505</b>		Prep Date: <b>10/19/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

ND

0.10

Surr: 4-Terphenyl-d14

0.1236

0

0.1143

0

108

31-176

0

<b>LCS</b>		Sample ID: <b>DLCSW1-77638-77638</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 05:42 PM</b>		
Client ID:		Run ID: <b>GC8_151019B</b>				SeqNo: <b>3518506</b>		Prep Date: <b>10/19/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

7.034

0.10

11.43

0

61.5

35-95

0

Surr: 4-Terphenyl-d14

0.1147

0

0.1143

0

100

31-176

0

<b>MS</b>		Sample ID: <b>15101005-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 06:12 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>GC8_151019B</b>				SeqNo: <b>3518508</b>		Prep Date: <b>10/19/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

6.45

0.10

11.43

0

56.4

29-96

0

Surr: 4-Terphenyl-d14

0.1042

0

0.1143

0

91.2

31-176

0

<b>MSD</b>		Sample ID: <b>15101005-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 06:42 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>GC8_151019B</b>				SeqNo: <b>3518509</b>		Prep Date: <b>10/19/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

6.458

0.10

11.43

0

56.5

29-96

6.45

0.114

30

Surr: 4-Terphenyl-d14

0.1063

0

0.1143

0

93

31-176

0.1042

1.95

30

The following samples were analyzed in this batch:

15101005-01B	15101005-02B	15101005-03B
15101005-04B	15101005-05B	15101005-06B
15101005-07B	15101005-08B	15101005-09B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R173930**      Instrument ID **GC9**      Method: **SW8015D**

<b>MBLK</b>	Sample ID: <b>GBLKW1-151015-R173930</b>					Units: <b>µg/L</b>		Analysis Date: <b>10/15/2015 12:03 PM</b>		
Client ID:	Run ID: <b>GC9_151015A</b>				SeqNo: <b>3512453</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	ND	200								
Surr: Toluene-d8	107.3	0	100	0	107	70-130	0			

<b>LCS</b>	Sample ID: <b>GLCSW1-151015-R173930</b>					Units: <b>µg/L</b>		Analysis Date: <b>10/15/2015 11:38 A</b>		
Client ID:	Run ID: <b>GC9_151015A</b>				SeqNo: <b>3512452</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	9764	200	10000	0	97.6	70-130	0			
Surr: Toluene-d8	102.5	0	100	0	102	70-130	0			

<b>MS</b>	Sample ID: <b>15101005-01A MS</b>					Units: <b>µg/L</b>		Analysis Date: <b>10/15/2015 08:43 PM</b>		
Client ID: <b>MW-1</b>	Run ID: <b>GC9_151015A</b>				SeqNo: <b>3513414</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	9373	200	10000	0	93.7	70-130	0			
Surr: Toluene-d8	102.8	0	100	0	103	70-130	0			

<b>MSD</b>	Sample ID: <b>15101005-01A MSD</b>					Units: <b>µg/L</b>		Analysis Date: <b>10/15/2015 09:08 PM</b>		
Client ID: <b>MW-1</b>	Run ID: <b>GC9_151015A</b>				SeqNo: <b>3513416</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	9175	200	10000	0	91.8	70-130	9373	2.14	30	
Surr: Toluene-d8	102.1	0	100	0	102	70-130	102.8	0.654	30	

The following samples were analyzed in this batch:

15101005-01A	15101005-02A	15101005-03A
15101005-04A	15101005-05A	15101005-06A
15101005-07A		

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R174076**      Instrument ID **GC9**      Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>GBLKW1-151016-R174076</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2015 12:41 PM</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516045</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	101.7	0	100	0	102	70-130	0			

<b>MBLK</b>		Sample ID: <b>GBLKW2-151016-R174076</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2015 11:33 PM</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516125</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	112.7	0	100	0	113	70-130	0			

<b>LCS</b>		Sample ID: <b>GLCSW1-151016-R174076</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2015 12:16 PM</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516043</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10140	200	10000	0	101	70-130	0			
Surr: Toluene-d8	103.8	0	100	0	104	70-130	0			

<b>LCS</b>		Sample ID: <b>GLCSW2-151016-R174076</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2015 11:09 PM</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516124</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	8794	200	10000	0	87.9	70-130	0			
Surr: Toluene-d8	106.8	0	100	0	107	70-130	0			

<b>MS</b>		Sample ID: <b>15101014-01A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2015 09:29 PM</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516093</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9081	200	10000	0	90.8	70-130	0			
Surr: Toluene-d8	105.3	0	100	0	105	70-130	0			

<b>MS</b>		Sample ID: <b>15101014-19A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/17/2015 08:56 A</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516134</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9122	200	10000	1646	74.8	70-130	0			
Surr: Toluene-d8	101.8	0	100	0	102	70-130	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R174076**      Instrument ID **GC9**      Method: **SW8015D**

MSD		Sample ID: <b>15101014-01A MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2015 09:54 PM</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516095</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	8825	200	10000	0	88.2	70-130	9081	2.86	30	
<i>Surr: Toluene-d8</i>	<i>104.9</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>105</i>	<i>70-130</i>	<i>105.3</i>	<i>0.4</i>	<i>30</i>	

MSD		Sample ID: <b>15101014-19A MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/17/2015 09:21 A</b>		
Client ID:		Run ID: <b>GC9_151016A</b>				SeqNo: <b>3516136</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	8765	200	10000	1646	71.2	70-130	9122	4	30	
<i>Surr: Toluene-d8</i>	<i>102.4</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>101.8</i>	<i>0.588</i>	<i>30</i>	

The following samples were analyzed in this batch:

15101005-08A	15101005-09A	15101005-10A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **77579**      Instrument ID **ICP2**      Method: **SW846 6010C**      (Dissolve)

<b>MBLK</b>		Sample ID: <b>MBLK-77579-77579</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 04:42 PM</b>		
Client ID:		Run ID: <b>ICP2_151019A</b>				SeqNo: <b>3518171</b>		Prep Date: <b>10/16/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	ND	0.50								
Iron	ND	0.080								
Magnesium	ND	0.20								
Manganese	ND	0.0050								
Potassium	ND	0.20								
Sodium	ND	0.20								

<b>LCS</b>		Sample ID: <b>LCS-77579-77579</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 04:48 PM</b>		
Client ID:		Run ID: <b>ICP2_151019A</b>				SeqNo: <b>3518173</b>		Prep Date: <b>10/16/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	9.604	0.50	10	0	96	80-120	0			
Iron	9.566	0.080	10	0	95.7	80-120	0			
Magnesium	9.863	0.20	10	0	98.6	80-120	0			
Manganese	0.1107	0.0050	0.1	0	111	80-120	0			
Potassium	9.386	0.20	10	0	93.9	80-120	0			
Sodium	9.704	0.20	10	0	97	80-120	0			

<b>MS</b>		Sample ID: <b>15101005-01DMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 04:59 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>ICP2_151019A</b>				SeqNo: <b>3518177</b>		Prep Date: <b>10/16/2015</b>		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	199.5	5.0	100	87.3	112	75-125	0			
Iron	113.9	0.80	100	-0.01145	114	75-125	0			
Magnesium	160.5	2.0	100	44.49	116	75-125	0			
Manganese	1.163	0.050	1	-5.125E-05	116	75-125	0			
Potassium	113.1	2.0	100	1.061	112	75-125	0			
Sodium	176.5	2.0	100	63.67	113	75-125	0			

<b>MSD</b>		Sample ID: <b>15101005-01DMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2015 05:04 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>ICP2_151019A</b>				SeqNo: <b>3518178</b>		Prep Date: <b>10/16/2015</b>		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	198.5	5.0	100	87.3	111	75-125	199.5	0.489	20	
Iron	113.9	0.80	100	-0.01145	114	75-125	113.9	0.00586	20	
Magnesium	159.8	2.0	100	44.49	115	75-125	160.5	0.454	20	
Manganese	1.161	0.050	1	-5.125E-05	116	75-125	1.163	0.242	20	
Potassium	113.2	2.0	100	1.061	112	75-125	113.1	0.0827	20	
Sodium	176.4	2.0	100	63.67	113	75-125	176.5	0.0692	20	

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

**QC BATCH REPORT**

Batch ID: **77579**      Instrument ID **ICP2**      Method: **SW846 6010C**      **(Dissolve)**

<b>The following samples were analyzed in this batch:</b>	15101005-01D	15101005-02D	15101005-03D
	15101005-04D	15101005-05D	15101005-06D
	15101005-07D	15101005-08D	15101005-09D

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **77637** Instrument ID **SVMS6** Method: **SW846 8270D**

MBLK		Sample ID: <b>SBLKW1-77637-77637</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/19/2015 09:20 PM</b>		
Client ID:		Run ID: <b>SVMS6_151019A</b>				SeqNo: <b>3519781</b>		Prep Date: <b>10/19/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	ND	5.0								
2-Methylnaphthalene	ND	5.0								
Acenaphthene	ND	5.0								
Acenaphthylene	ND	5.0								
Anthracene	ND	5.0								
Benzo(a)anthracene	ND	5.0								
Benzo(a)pyrene	ND	5.0								
Benzo(b)fluoranthene	ND	5.0								
Benzo(g,h,i)perylene	ND	5.0								
Benzo(k)fluoranthene	ND	5.0								
Chrysene	ND	5.0								
Dibenzo(a,h)anthracene	ND	5.0								
Fluoranthene	ND	5.0								
Fluorene	ND	5.0								
Indeno(1,2,3-cd)pyrene	ND	5.0								
Naphthalene	ND	5.0								
Phenanthrene	ND	5.0								
Pyrene	ND	5.0								
Surr: 2-Fluorobiphenyl	136.3	0	114	0	120	20-140	0			
Surr: 4-Terphenyl-d14	122.1	0	114	0	107	22-172	0			
Surr: Nitrobenzene-d5	100.1	0	114	0	87.8	8-140	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **77637**      Instrument ID **SVMS6**      Method: **SW846 8270D**

LCS		Sample ID: <b>SLCSW1-77637-77637</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/19/2015 09:45 PM</b>		
Client ID:		Run ID: <b>SVMS6_151019A</b>				SeqNo: <b>3519782</b>		Prep Date: <b>10/19/2015</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	47.27	5.0	45.7	0	103	50-140	0			
2-Methylnaphthalene	49.19	5.0	45.7	0	108	50-140	0			
Acenaphthene	45.46	5.0	45.7	0	99.5	60-140	0			
Acenaphthylene	46.08	5.0	45.7	0	101	60-140	0			
Anthracene	45.87	5.0	45.7	0	100	60-140	0			
Benzo(a)anthracene	44.78	5.0	45.7	0	98	60-140	0			
Benzo(a)pyrene	46.58	5.0	45.7	0	102	60-140	0			
Benzo(b)fluoranthene	44.43	5.0	45.7	0	97.2	60-140	0			
Benzo(g,h,i)perylene	47.7	5.0	45.7	0	104	60-140	0			
Benzo(k)fluoranthene	48.82	5.0	45.7	0	107	60-140	0			
Chrysene	46.88	5.0	45.7	0	103	60-140	0			
Dibenzo(a,h)anthracene	47.25	5.0	45.7	0	103	60-140	0			
Fluoranthene	55.38	5.0	45.7	0	121	60-140	0			
Fluorene	46.93	5.0	45.7	0	103	60-140	0			
Indeno(1,2,3-cd)pyrene	47.41	5.0	45.7	0	104	60-140	0			
Naphthalene	46.22	5.0	45.7	0	101	40-140	0			
Phenanthrene	45.33	5.0	45.7	0	99.2	60-140	0			
Pyrene	45.12	5.0	45.7	0	98.7	60-140	0			
<i>Surr: 2-Fluorobiphenyl</i>	116.3	0	114	0	102	20-140	0			
<i>Surr: 4-Terphenyl-d14</i>	113.4	0	114	0	99.5	22-172	0			
<i>Surr: Nitrobenzene-d5</i>	111.4	0	114	0	97.7	8-140	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **77637** Instrument ID **SVMS6** Method: **SW846 8270D**

MS				Sample ID: 15101005-01B MS			Units: µg/L		Analysis Date: 10/19/2015 10:10 PM	
Client ID: MW-1				Run ID: SVMS6_151019A			SeqNo: 3519783		Prep Date: 10/19/2015	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	51.15	5.0	45.7	0	112	50-140	0			
2-Methylnaphthalene	57.23	5.0	45.7	0	125	50-140	0			
Acenaphthene	46.22	5.0	45.7	0	101	60-140	0			
Acenaphthylene	47.84	5.0	45.7	0	105	60-140	0			
Anthracene	46.88	5.0	45.7	0	103	60-140	0			
Benzo(a)anthracene	44.85	5.0	45.7	0	98.1	60-140	0			
Benzo(a)pyrene	47.31	5.0	45.7	0	104	60-140	0			
Benzo(b)fluoranthene	44.09	5.0	45.7	0	96.5	60-140	0			
Benzo(g,h,i)perylene	51.04	5.0	45.7	0	112	60-140	0			
Benzo(k)fluoranthene	48.8	5.0	45.7	0	107	60-140	0			
Chrysene	47.77	5.0	45.7	0	105	60-140	0			
Dibenzo(a,h)anthracene	51.22	5.0	45.7	0	112	60-140	0			
Fluoranthene	58.65	5.0	45.7	0	128	60-140	0			
Fluorene	47.59	5.0	45.7	0	104	60-140	0			
Indeno(1,2,3-cd)pyrene	50.29	5.0	45.7	0	110	60-140	0			
Naphthalene	51.45	5.0	45.7	0	113	40-140	0			
Phenanthrene	47.2	5.0	45.7	0	103	60-140	0			
Pyrene	45.51	5.0	45.7	0	99.6	60-140	0			
Surr: 2-Fluorobiphenyl	120.9	0	114	0	106	20-140	0			
Surr: 4-Terphenyl-d14	107.2	0	114	0	94.1	22-172	0			
Surr: Nitrobenzene-d5	113	0	114	0	99.1	8-140	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **77637**      Instrument ID **SVMS6**      Method: **SW846 8270D**

MSD				Sample ID: 15101005-01B MSD			Units: µg/L		Analysis Date: 10/19/2015 10:34 PM		
Client ID: MW-1			Run ID: SVMS6_151019A			SeqNo: 3519784		Prep Date: 10/19/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
2-Chloronaphthalene	50.74	5.0	45.7	0	111	50-140	51.15	0.808	30		
2-Methylnaphthalene	57.58	5.0	45.7	0	126	50-140	57.23	0.597	30		
Acenaphthene	49.99	5.0	45.7	0	109	60-140	46.22	7.84	30		
Acenaphthylene	52.43	5.0	45.7	0	115	60-140	47.84	9.16	30		
Anthracene	55.68	5.0	45.7	0	122	60-140	46.88	17.2	30		
Benzo(a)anthracene	56.27	5.0	45.7	0	123	60-140	44.85	22.6	30		
Benzo(a)pyrene	57.97	5.0	45.7	0	127	60-140	47.31	20.2	30		
Benzo(b)fluoranthene	59.06	5.0	45.7	0	129	60-140	44.09	29	30		
Benzo(g,h,i)perylene	63.43	5.0	45.7	0	139	60-140	51.04	21.6	30		
Benzo(k)fluoranthene	56.05	5.0	45.7	0	123	60-140	48.8	13.8	30		
Chrysene	58.1	5.0	45.7	0	127	60-140	47.77	19.5	30		
Dibenzo(a,h)anthracene	61.07	5.0	45.7	0	134	60-140	51.22	17.5	30		
Fluoranthene	62.15	5.0	45.7	0	136	60-140	58.65	5.79	30		
Fluorene	61.19	5.0	45.7	0	134	60-140	47.59	25	30		
Indeno(1,2,3-cd)pyrene	63.31	5.0	45.7	0	139	60-140	50.29	22.9	30		
Naphthalene	59.57	5.0	45.7	0	130	40-140	51.45	14.6	30		
Phenanthrene	56.5	5.0	45.7	0	124	60-140	47.2	17.9	30		
Pyrene	55.79	5.0	45.7	0	122	60-140	45.51	20.3	30		
Surr: 2-Fluorobiphenyl	141.7	0	114	0	124	20-140	120.9	15.8	30		
Surr: 4-Terphenyl-d14	123.8	0	114	0	109	22-172	107.2	14.4	30		
Surr: Nitrobenzene-d5	141.6	0	114	0	124	8-140	113	22.4	30		

The following samples were analyzed in this batch:

15101005-01B	15101005-02B	15101005-03B
15101005-04B	15101005-05B	15101005-06B
15101005-07B	15101005-08B	15101005-09B

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R174110**      Instrument ID **VMS10**      Method: **SW8260B**

MBLK				Sample ID: VBLKW3-151016-R174110				Units: µg/L			Analysis Date: 10/17/2015 04:12 PM		
Client ID:			Run ID: VMS10_151016C			SeqNo: 3517211			Prep Date:			DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	1.0											
Ethylbenzene	ND	1.0											
m,p-Xylene	ND	2.0											
o-Xylene	ND	1.0											
Toluene	ND	1.0											
Xylenes, Total	ND	3.0											
Surr: 1,2-Dichloroethane-d4	21.29	0	20	0	106	75-120	0						
Surr: 4-Bromofluorobenzene	19.6	0	20	0	98	80-110	0						
Surr: Dibromofluoromethane	20.47	0	20	0	102	85-115	0						
Surr: Toluene-d8	19.45	0	20	0	97.2	85-110	0						

LCS				Sample ID: <b>VLCSW5-151016-R174110</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/17/2015 05:24 PM</b>	
Client ID:			Run ID: <b>VMS10_151016C</b>			SeqNo: <b>3516858</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.31	1.0	20	0	107	85-125	0				
Ethylbenzene	21.95	1.0	20	0	110	85-125	0				
m,p-Xylene	45.09	2.0	40	0	113	75-130	0				
o-Xylene	22.59	1.0	20	0	113	80-125	0				
Toluene	20.28	1.0	20	0	101	85-125	0				
Xylenes, Total	67.68	3.0	60	0	113	80-126	0				
<i>Surr: 1,2-Dichloroethane-d4</i>	21.29	0	20	0	106	75-120	0				
<i>Surr: 4-Bromofluorobenzene</i>	20.66	0	20	0	103	80-110	0				
<i>Surr: Dibromofluoromethane</i>	21.54	0	20	0	108	85-115	0				
<i>Surr: Toluene-d8</i>	19.36	0	20	0	96.8	85-110	0				

MS				Sample ID: 1510748-06A MS				Units: µg/L		Analysis Date: 10/18/2015 01:01 A	
Client ID:			Run ID: VMS10_151016C			SeqNo: 3516877		Prep Date:		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	209.9	10	200	0	105	85-125	0				
Ethylbenzene	221.4	10	200	0	111	85-125	0				
m,p-Xylene	459.5	20	400	0	115	75-130	0				
o-Xylene	224.3	10	200	0	112	80-125	0				
Toluene	204.4	10	200	0	102	85-125	0				
Xylenes, Total	683.8	30	600	0	114	80-126	0				
Surr: 1,2-Dichloroethane-d4	211.7	0	200	0	106	75-120	0				
Surr: 4-Bromofluorobenzene	208.1	0	200	0	104	80-110	0				
Surr: Dibromofluoromethane	213.4	0	200	0	107	85-115	0				
Surr: Toluene-d8	192	0	200	0	96	85-110	0				

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R174110**      Instrument ID **VMS10**      Method: **SW8260B**

MSD				Sample ID: 1510748-06A MSD			Units: µg/L		Analysis Date: 10/18/2015 01:25 A		
Client ID:		Run ID: VMS10_151016C			SeqNo: 3516878		Prep Date:		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	203	10	200	0	102	85-125	209.9	3.34	30		
Ethylbenzene	209.4	10	200	0	105	85-125	221.4	5.57	30		
m,p-Xylene	431.6	20	400	0	108	75-130	459.5	6.26	30		
o-Xylene	208.8	10	200	0	104	80-125	224.3	7.16	30		
Toluene	197.3	10	200	0	98.6	85-125	204.4	3.53	30		
Xylenes, Total	640.4	30	600	0	107	80-126	683.8	6.55	30		
Surr: 1,2-Dichloroethane-d4	212.4	0	200	0	106	75-120	211.7	0.33	30		
Surr: 4-Bromofluorobenzene	207.7	0	200	0	104	80-110	208.1	0.192	30		
Surr: Dibromofluoromethane	213	0	200	0	106	85-115	213.4	0.188	30		
Surr: Toluene-d8	196.4	0	200	0	98.2	85-110	192	2.27	30		

The following samples were analyzed in this batch:

15101005-01A	15101005-02A	15101005-03A
15101005-04A	15101005-05A	15101005-06A
15101005-07A	15101005-08A	15101005-09A
15101005-10A		

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R174199A**      Instrument ID **VMS10**      Method: **SW8260B**

MBLK				Sample ID: VBLKW2-151019-R174199A				Units: µg/L		Analysis Date: 10/20/2015 02:45 A	
Client ID:			Run ID: VMS10_151019A			SeqNo: 3518670		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	ND	1.0									
Ethylbenzene	ND	1.0									
m,p-Xylene	ND	2.0									
o-Xylene	ND	1.0									
Toluene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 1,2-Dichloroethane-d4	20.3	0	20	0	102	75-120		0			
Surr: 4-Bromofluorobenzene	18.62	0	20	0	93.1	80-110		0			
Surr: Dibromofluoromethane	19.27	0	20	0	96.4	85-115		0			
Surr: Toluene-d8	20.15	0	20	0	101	85-110		0			

LCS				Sample ID: VLCSW3-151019-R174199A				Units: µg/L		Analysis Date: 10/20/2015 01:33 A	
Client ID:			Run ID: VMS10_151019A			SeqNo: 3518668		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.83	1.0	20	0	104	85-125	0				
Ethylbenzene	21.53	1.0	20	0	108	85-125	0				
m,p-Xylene	44.07	2.0	40	0	110	75-130	0				
o-Xylene	21.63	1.0	20	0	108	80-125	0				
Toluene	21.4	1.0	20	0	107	85-125	0				
Xylenes, Total	65.7	3.0	60	0	110	80-126	0				
Surr: 1,2-Dichloroethane-d4	18.9	0	20	0	94.5	75-120	0				
Surr: 4-Bromofluorobenzene	20.64	0	20	0	103	80-110	0				
Surr: Dibromofluoromethane	19.73	0	20	0	98.6	85-115	0				
Surr: Toluene-d8	20.08	0	20	0	100	85-110	0				

MS				Sample ID: 1510758-06B MS				Units: µg/L		Analysis Date: 10/20/2015 11:10 A	
Client ID:			Run ID: VMS10_151019A			SeqNo: 3518910		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.11	1.0	20	1.92	106	85-125		0			
Ethylbenzene	20.58	1.0	20	0	103	85-125		0			
m,p-Xylene	41.84	2.0	40	0.15	104	75-130		0			
o-Xylene	19.98	1.0	20	0	99.9	80-125		0			
Toluene	20.69	1.0	20	0.26	102	85-125		0			
Xylenes, Total	61.82	3.0	60	0	103	80-126		0			
Surr: 1,2-Dichloroethane-d4	20.35	0	20	0	102	75-120		0			
Surr: 4-Bromofluorobenzene	19.62	0	20	0	98.1	80-110		0			
Surr: Dibromofluoromethane	20.18	0	20	0	101	85-115		0			
Surr: Toluene-d8	19.66	0	20	0	98.3	85-110		0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R174199A**      Instrument ID **VMS10**      Method: **SW8260B**

MSD		Sample ID: <b>1510758-06B MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/20/2015 11:34 A</b>		
Client ID:		Run ID: <b>VMS10_151019A</b>				SeqNo: <b>3518911</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.95	1.0	20	1.92	105	85-125	23.11	0.695	30	
Ethylbenzene	22	1.0	20	0	110	85-125	20.58	6.67	30	
m,p-Xylene	44.06	2.0	40	0.15	110	75-130	41.84	5.17	30	
o-Xylene	21.71	1.0	20	0	109	80-125	19.98	8.3	30	
Toluene	21.94	1.0	20	0.26	108	85-125	20.69	5.86	30	
Xylenes, Total	65.77	3.0	60	0	110	80-126	61.82	6.19	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	20.38	0	20	0	102	75-120	20.35	0.147	30	
<i>Surr: 4-Bromofluorobenzene</i>	20.26	0	20	0	101	80-110	19.62	3.21	30	
<i>Surr: Dibromofluoromethane</i>	20.35	0	20	0	102	85-115	20.18	0.839	30	
<i>Surr: Toluene-d8</i>	20.13	0	20	0	101	85-110	19.66	2.36	30	

The following samples were analyzed in this batch:

15101005-03A	15101005-08A	15101005-09A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 15101005  
**Project:** WPX TR 51-5-397 Quarterly GW Monitoring

## QC BATCH REPORT

Batch ID: **R174407**      Instrument ID **IC3**      Method: **SW9056A**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R174407</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/21/2015 10:29 A</b>		
Client ID:		Run ID: <b>IC3_151021A</b>				SeqNo: <b>3522850</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	ND	0.20								
Chloride	ND	1.0								
Fluoride	ND	0.10								
Sulfate	ND	1.0								

<b>LCS</b>		Sample ID: <b>LCS-R174407</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/21/2015 10:49 A</b>		
Client ID:		Run ID: <b>IC3_151021A</b>				SeqNo: <b>3522851</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	1.843	0.20	2	0	92.1	88-113	0			
Chloride	9.488	1.0	10	0	94.9	88-110	0			
Fluoride	1.967	0.10	2	0	98.3	86-111	0			
Sulfate	9.949	1.0	10	0	99.5	85-110	0			

<b>MS</b>		Sample ID: <b>15101005-01C MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/21/2015 01:51 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>IC3_151021A</b>				SeqNo: <b>3522866</b>		Prep Date:		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	42.95	4.0	40	0	107	75-125	0			
Chloride	256	20	200	57.94	99	75-125	0			
Fluoride	42.78	2.0	40	0	107	75-125	0			
Sulfate	348	20	200	134.5	107	75-125	0			

<b>MSD</b>		Sample ID: <b>15101005-01C MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/21/2015 02:11 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>IC3_151021A</b>				SeqNo: <b>3522868</b>		Prep Date:		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	43.6	4.0	40	0	109	75-125	42.95	1.5	20	
Chloride	255.1	20	200	57.94	98.6	75-125	256	0.345	20	
Fluoride	42.6	2.0	40	0	106	75-125	42.78	0.431	20	
Sulfate	341	20	200	134.5	103	75-125	348	2.04	20	

The following samples were analyzed in this batch:

15101005-01C	15101005-02C	15101005-03C
15101005-04C	15101005-05C	15101005-06C
15101005-07C	15101005-08C	15101005-09C

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
 TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

WORKORDER  
#

15101005

Form 202r6

PROJECT NAME		WPX TR 31-5-697 Quarterly GW Monitoring		SAMPLER		Casey Richardson/ Mark Mumby		DATE		10.14.15		PAGE		1 of 1	
PROJECT No.				SITE ID		TR 31-5-697		TURNAROUND		Standard		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HRL Compliance Solutions, Inc.		BILL TO COMPANY		WPX Energy									
SEND REPORT TO		Mark Mumby, Karolina Blaney		INVOICE ATTN TO		Karolina Blaney									
ADDRESS		2385 F 1/2 Road		ADDRESS		1058 County Road 215									
CITY/STATE/ZIP		Grand Junction, CO. 81505		CITY/STATE/ZIP		Parachute, CO 81635									
PHONE		970-243-3271		PHONE		970-683-2295									
FAX		970-243-3280		FAX		970-285-9573									
E-MAIL		mmumby@hrlcomp.com crichardson@hrlcomp.com		E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	GRO	DRO	PAHs	Disolved Metals - Cations	Anions		
1	MW 1	W	10/13/2015	1030	12	1, 8		x	x	x	x	x	x		
2	MW 2	W	10/13/2015	1325	12	1, 8		x	x	x	x	x	x		
3	MW 3	W	10/13/2015	1158	12	1, 8		x	x	x	x	x	x		
4	MW 4	W	10/13/2015	1135	12	1, 8		x	x	x	x	x	x		
5	MW 5	W	10/13/2015	1221	12	1, 8		x	x	x	x	x	x		
6	MW 6	W	10/13/2015	1052	12	1, 8		x	x	x	x	x	x		
7	MW 7	W	10/13/2015	1105	12	1, 8		x	x	x	x	x	x		
8	MW 8	W	10/13/2015	1241	12	1, 8		x	x	x	x	x	x		
9	MW 9	W	10/13/2015	1304	12	1, 8		x	x	x	x	x	x		
10	Trip Blank	W	10/13/2015	-	12			x							

\*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)	
	x	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	<i>C Richardson</i>	CASEY RICHARDSON	10-14-15	1200
RECEIVED BY	<i>MM</i>	W. M.	10-15-15	1200
RELINQUISHED BY	<i>W</i>		10-15-15	1300
RECEIVED BY	<i>Keith Wierenga</i>	KEITH WIERENGA	10/15/15	1415
RELINQUISHED BY				
RECEIVED BY				

ORIGIN ID: RILA (816) 288-1033  
 NICK MARTINEZ  
 ALS ENVIRONMENTAL PARACHUTE  
 PARACHUTE SERVICE CENTER  
 127 EAST 1ST ST  
 PARACHUTE, CO 81635  
 UNITED STATES US

SHIP DATE: 14OCT15  
 ACTWGT: 50.00 LB  
 CAD: 2284840/NET3870  
 DIMS: 14x26x15 IN  
 BILL SENDER

TO **SAMPLE RECEIVING**  
**ALS ENVIRONMENTAL HOLLAND LAB**  
**3352 128TH AVE**

**HOLLAND MI 49424**

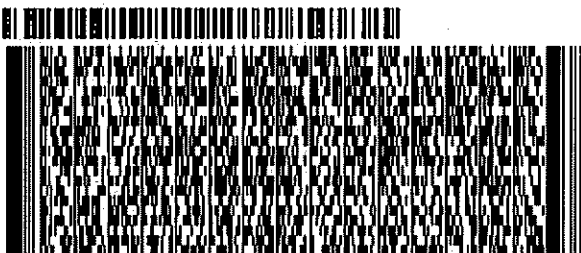
(816) 399-6070

REF: 101415-1

INV:

PO: PARACHUTE

DEPT:



**FedEx**  
Express



REL#  
3785346

539,3401A31D0

1 of 3

TRK#

0201

**7747 4280 5170**

## MASTER ##

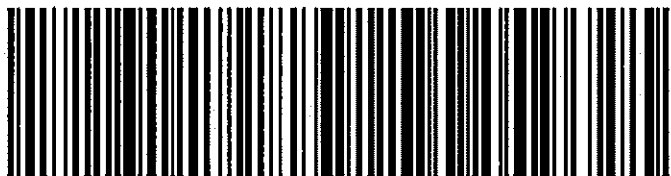
**XX HLMA**

**THU - 15 OCT 10:30A**  
**PRIORITY OVERNIGHT**

**49424**

MI-US

**GRR**



**After printing this label:**

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 15-Oct-15 14:15

Work Order: 15101005

Received by: KRW

Checklist completed by Keith Wurenga  
eSignature

15-Oct-15  
Date

Reviewed by: Chad Whelton  
eSignature

15-Oct-15  
Date

Matrices: Water

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.0/3.0 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>10/15/2015 3:10:12 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: