

## May 2014 Potentiometric Map

Location: TR 31-5-697  
WPX Energy Rocky Mountain, LLC

### Features

- Monitoring Well
- Potentiometric Lines
- WPX Access Roads
- Perennial Stream
- Intermittent Stream

### PLSS

- Township
- Section

0 100 200 Feet





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 2	MW 2	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	10/19/2011	4/9/2012	7/12/2012	9/18/2012	12/5/2012
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	26.41	25.87	NT	28.35	30.75
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.6	ND	3.4	120
GRO	mg/L		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8	2.5	10	28
Benzene	ug/l	5 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	70	98	63	110
Ethylbenzene	ug/l	700 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	92	58	56	84	590
Toluene	ug/l	560 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	2.6	ND	36
Xylene (total)	ug/l	1400 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,600	1,200	470	1400	17,000
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	7.5	ND	ND	ND	230
2-Chloronaphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND	ND	ND	ND
2-Methylnaphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	13	ND	ND	ND	600
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	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	ND	ND	ND	NT	NT	NT	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	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	13	7	ND	5.6	230
Phenanthrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	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		87	64	78	71	68	73	84	76	78	84	NT	7.7	54	71	46	59
Iron	mg/l		0.12	ND	1.1	0.55	0.12	1.3	ND	ND	ND	0.12	NT	ND	0.13	0.44	0.098	0.2
Magnesium	mg/l		43	32	37	34	33	37	42	38	39	42	NT	39	28	34	29	30
Manganese	mg/l		ND	ND	0.036	0.024	0.023	1	0.29	0.042	ND	ND	NT	0.95	0.47	0.53	0.092	0.45
Potassium	mg/l		1.1	0.64	0.9	0.98	0.74	14	1.1	0.73	0.82	0.8	NT	1.2	0.79	1.6	0.66	0.98
Sodium	mg/l		68	49	56	74	51	57	59	56	59	60	NT	85	59	83	150	73
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	0.41	0.34	0.45	0.47	0.47
Chloride	mg/l	1.25 x bkgd	42	52	45	47	41	44	57	48	48	34	61	53	45	53	61	54
Nitrogen, Nitrate	mg/l		1.1	1.5	1.1	0.7	0.64	1.2	1.2	0.94	NT	NT	NT	0.047	0.18	ND	ND	ND
Nitrogen, Nitrite	mg/l		ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND	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	0.047	0.1	ND	ND	ND
Sulfate	mg/l	1.25 x bkgd	130	110	120	130	120	110	120	120	110	NT	110	67	74	26	35	28
Fluoride	mg/l		0.19	0.17	0.24	0.18	0.16	0.19	0.16	0.13	0.17	75	0.1	0.19	0.18	0.27	0.21	0.2
TDS	mg/l	1.25 x bkgd	652	624	NT	601	575	563	586	602	660	NT		618	627	NT	640	607

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 3	MW 3	MW 3	MW 3	MW 3	MW 3	MW 3	MW 3	MW 3	MW 3
Date Sampled:			3/27/2013	5/15/2013	7/11/2013	11/8/2013	5/29/2014	10/8/2014	10/19/2011	4/9/2012	7/12/2012	9/18/2012	12/5/2012	3/27/2013	5/15/2013	7/11/2013	11/8/2013	5/29/2014
Depth to Water (ft.)			28.21	26.64	29.48	30.48	25.97	28.43	33.38	33.02	NT	33.04	34.3	32.74	30.31	32.64	33.98	30.11
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		39	46	22	210	88	24	40	1.1	ND	1.5	2	69	7.6	5.4	13	2.4
GRO	mg/L		21	62	9.5	8.6	6.4	6.4	4.8	3	1.4	1.8	1.7	1.9	1.4	1.6	1.2	1.6
Benzene	ug/l	5 ug/l	150	60	37	54	60	21	55	25	8.1	4.4	ND	4.1	1.3	ND	5.4	5.1
Ethylbenzene	ug/l	700 ug/l	190	120	61	40	68	50	97	95	28	12	7.1	12	8.6	3.9	ND	21
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	2,800	2,900	1,000	2,400	900	560	600	520	140	100	84	100	29	22	3.6	80
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		22	42	29	NT	NT	NT	ND	ND	ND	ND	5.7	17	ND	ND	NT	NT
2-Chloronaphthalene	ug/l		ND	ND	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT
2-Methylnaphthalene	ug/l		52	110	77	NT	NT	NT	ND	ND	ND	ND	11	10	5.7	ND	NT	NT
Acenaphthene	ug/l		ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND	ND	ND	ND
Acenaphthylene	ug/l		ND	ND	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	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	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	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	5.9	6.8	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		23	60	19	ND	14	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/l		ND	ND	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	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		78	99	79	86	82	NT	79	99	87	75	69	870	110	83	87	160
Iron	mg/l		0.12	0.29	0.37	0.71	0.28	NT	0.12	1.1	0.53	0.64	0.18	4	0.22	ND	ND	1.1
Magnesium	mg/l		39	50	41	46	43	NT	37	42	36	35	33	410	50	40	42	66
Manganese	mg/l		0.59	0.7	0.46	0.62	0.5	NT	1.7	3.2	1.9	0.61	2.5	6.1	1.4	0.68	0.68	3.4
Potassium	mg/l		1.2	1.5	1.3	1.2	1	NT	1.1	1.6	1.7	1	0.74	9.7	1.2	0.88	0.89	1.3
Sodium	mg/l		90	82	83	89	87	NT	89	130	81	59	52	73	88	61	72	170
General Chemistry																		
Bromide	mg/l		0.42	0.36	0.45	0.38	0.45	0.37	0.55	2.5	0.68	0.36	0.31	0.52	1	0.37	0.56	4
Chloride	mg/l	1.25 x bkgd	51	53	58	50	64	53	72	300	95	45	38	61	130	51	68	500
Nitrogen, Nitrate	mg/l		0.14	0.044	ND	NT	NT	NT	ND	ND	ND	ND	ND	0.051	0.023	ND	NT	NT
Nitrogen, Nitrite	mg/l		ND	ND	0.038	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	0.032	NT	NT
Nitrogen, Nitrate-Nitrite			0.14	0.044	0.038	NT	0.24	0.023	ND	ND	ND	ND	ND	0.051	0.023	0.032	NT	ND
Sulfate	mg/l	1.25 x bkgd	24	41	50	37	NT	18	61	7.1	39	110	110	73	85	93	61	66
Fluoride	mg/l		0.18	0.16	0.14	0.16	NT	0.11	0.22	0.15	0.23	0.17	0.16	0.18	0.14	0.11	0.14	ND
TDS	mg/l	1.25 x bkgd	605	601	721	820	NT		640	1,190	NT	603	581	621	620	699	925	NT

Table 1

TR 31-5-697 Groundwater Analytical Results



Sample ID:		COGCC Table 910-1 Standards	MW 3	MW 4	MW 4	MW 4	MW 4	MW 4	MW 4	MW 4	MW 4	MW 4	MW 4	MW 4	MW 5	MW 5	MW 5	MW 5
Date Sampled:			10/8/2014	10/19/2011	4/9/2012	7/12/2012	9/18/2012	12/5/2012	3/27/2013	5/15/2013	7/11/2013	11/8/2013	5/29/2014	10/8/2014	7/11/2013	11/8/2013	5/29/2014	10/8/2014
Depth to Water (ft.)			34.9	28.83	27.56	NT	32.74	33.02	32.36	31.01	32.48	32.72	28.94	31.66	29.47	30.46	25.98	29.12
GC/MS Volatiles (SW846 8260B)																		
DRO	mg/L		7.9	3.1	0.9	7.3	0.87	1.3	1.4	1.3	0.65	ND	1.4	3.3	ND	ND	ND	3.0
GRO	mg/L		1.4	4.7	2.3	1.6	1.1	0.34	0.9	0.72	0.92	0.27	1.3	0.33	ND	ND	ND	ND
Benzene	ug/l	5 ug/l	23	67	17	27	16	9	2	13	14	ND	9.9	4.9	ND	ND	ND	ND
Ethylbenzene	ug/l	700 ug/l	5.4	96	72	44	13	2.4	ND	14	15	ND	36	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	3.2	470	160	130	44	7.8	3.2	56	69	ND	99	ND	ND	ND	ND	ND
GC/MS Semi-volatiles (SW846 8270C)																		
1-Methylnaphthalene	ug/l		NT	6.6	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	NT	NT
2-Chloronaphthalene	ug/l		NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	NT	NT
2-Methylnaphthalene	ug/l		NT	8.4	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	NT	NT
Acenaphthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/l		NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	NT	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		NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	NT	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	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/l		NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	NT	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		NT	78	74	79	80	68	910	99	88	83	90	NT	63	61	61	65
Iron	mg/l		NT	ND	ND	0.17	ND	0.091	1.1	0.17	ND	ND	0.35	NT	ND	ND	ND	0.9
Magnesium	mg/l		NT	37	34	35	34	31	430	47	41	40	44	NT	31	30	30	32
Manganese	mg/l		NT	1.7	1.6	1.8	0.92	1.3	17	0.19	1.8	1.5	1.6	NT	31	0.064	0.052	0.036
Potassium	mg/l		NT	1.1	0.84	0.98	0.79	0.77	9.1	1.2	0.91	0.84	0.81	NT	0.032	1.1	0.66	1.2
Sodium	mg/l		NT	100	87	82	100	71	900	92	83	82	85	NT	69	80	71	80
General Chemistry																		
Bromide	mg/l		0.85	0.47	0.84	0.38	0.48	0.45	0.55	0.59	0.5	0.47	0.62	0.47	ND	0.18	0.22	0.27
Chloride	mg/l	1.25 x bkgd	99	63	75	64	61	52	62	84	68	58	87	74	17	19	20	29
Nitrogen, Nitrate	mg/l		NT	ND	ND	ND	ND	ND	0.05	ND	ND	NT	NT	NT	ND	NT	NT	NT
Nitrogen, Nitrite	mg/l		NT	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NT	NT	NT
Nitrogen, Nitrate-Nitrite			ND	ND	ND	ND	ND	ND	0.05	ND	ND	NT	ND	ND	ND	NT	ND	0.028
Sulfate	mg/l	1.25 x bkgd	35	2.7	10	12	49	49	74	21	9.7	24	23	43	110	110	110	100
Fluoride	mg/l		ND	0.2	0.18	0.23	0.16	0.16	0.18	0.14	0.11	0.15	ND	ND	0.15	0.17	0.12	ND
TDS	mg/l	1.25 x bkgd		623	689	NT	634	601	605	610	715	730	NT		589	584	NT	

Table 1

TR 31-5-697 Groundwater Analytical Results



Sample ID:		COGCC Table 910-1 Standards	MW 6 7/11/2013	MW 6 11/8/2013	MW 6 5/29/2014	MW 6 10/8/2014	MW 7 7/11/2013	MW 7 11/8/2013	MW 7 5/29/2014	MW 7 10/8/2014	MW 8 11/8/2013	MW 8 5/29/2014	MW 8 10/8/2014	MW 9 11/8/2013	MW 9 5/29/2014	MW 9 10/8/2014
Date Sampled:																
Depth to Water (ft.)			25.35	25.62	21.42	25.32	28.42	28.62	25.04	28.46	22.09	18.38	21.07	24.42	20.51	23.57
GC/MS Volatiles (SW846 8260B)																
DRO	mg/L		ND	ND	ND	1.7	ND	ND	ND	1.5	1.5	ND	1.4	3.3	1.1	3.5
GRO	mg/L		ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.44	0.24	11	0.55	3.8
Benzene	ug/l	5 ug/l	1.5	ND	1.8	ND	ND	ND	ND	ND	90	9.8	9.2	ND	ND	62
Ethylbenzene	ug/l	700 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	16	6.2	2.0	ND	ND	51
Toluene	ug/l	560 ug/l	ND	ND	ND	ND	ND	ND	ND	ND	26	ND	ND	16	ND	ND
Xylene (total)	ug/l	1400 ug/l	18	ND	ND	ND	ND	ND	ND	ND	150	83	25	1,800	8	700
GC/MS Semi-volatiles (SW846 8270C)																
1-Methylnaphthalene	ug/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Chloronaphthalene	ug/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Methylnaphthalene	ug/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
Acenaphthene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
Anthracene	ug/l		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
Benzo(a)pyrene	ug/l		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
Benzo(g,h,i)perylene	ug/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzo(k)fluoranthene	ug/l		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
Dibenzo(a,h)anthracene	ug/l		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
Fluorene	ug/l		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
Naphthalene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30	30	6.1
Phenanthrene	ug/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pyrene	ug/l		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis																
Calcium	mg/l		76	73	74	76	63	71	79	70	87	72	76	69	68	68
Iron	mg/l		0.12	ND	ND	1.5	ND	ND	ND	0.19	ND	0.11	3.5	ND	ND	1.1
Magnesium	mg/l		36	35	35	35	31	36	39	34	45	37	38	36	35	35
Manganese	mg/l		0.77	0.77	0.091	0.7	0.032	0.51	0.39	0.5	1	0.032	0.23	0.42	0.056	0.44
Potassium	mg/l		1	0.88	0.68	1.4	1.2	0.79	0.91	0.86	1.3	0.86	2	2	0.8	1.5
Sodium	mg/l		76	83	65	70	69	82	85	78	82	59	65	100	59	130
General Chemistry																
Bromide	mg/l		0.31	0.34	0.32	0.34	ND	0.2	0.44	0.35	0.44	0.31	0.41	0.58	0.27	1.1
Chloride	mg/l	1.25 x bkgd	48	43	39	47	17	37	55	44	51	46	56	70	37	140
Nitrogen, Nitrate	mg/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nitrogen, Nitrite	mg/l		ND	NT	NT	NT	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nitrogen, Nitrate-Nitrite			ND	NT	0.24	ND	ND	NT	0.025	ND	NT	1.2	1.0	NT	ND	0.033
Sulfate	mg/l	1.25 x bkgd	53	53	63	71	110	47	41	44	63	110	78	70	100	29
Fluoride	mg/l		0.11	0.15	0.11	ND	0.15	0.14	ND	ND	0.17	0.13	ND	0.27	0.13	0.11
TDS	mg/l	1.25 x bkgd	625	680	NT		635	658	NT		746	NT		748	NT	



21-Oct-2014

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

Re: **WPX TR 31-5-697 Quarterly MW 10.8.14**

Work Order: **1410567**

Dear Mark,

ALS Environmental received 10 samples on 09-Oct-2014 09:30 AM 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 40.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston  
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 blue triangle with a yellow flame inside.

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

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Work Order:** 1410567

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**Work Order Sample Summary**

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<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>
1410567-01	MW-1	Water		10/8/2014 11:23	10/9/2014 09:30	<input type="checkbox"/>
1410567-02	MW-2	Water		10/8/2014 14:30	10/9/2014 09:30	<input type="checkbox"/>
1410567-03	MW-3	Water		10/8/2014 12:55	10/9/2014 09:30	<input type="checkbox"/>
1410567-04	MW-4	Water		10/8/2014 12:30	10/9/2014 09:30	<input type="checkbox"/>
1410567-05	MW-5	Water		10/8/2014 13:10	10/9/2014 09:30	<input type="checkbox"/>
1410567-06	MW-6	Water		10/8/2014 11:50	10/9/2014 09:30	<input type="checkbox"/>
1410567-07	MW-7	Water		10/8/2014 12:10	10/9/2014 09:30	<input type="checkbox"/>
1410567-08	MW-8	Water		10/8/2014 13:35	10/9/2014 09:30	<input type="checkbox"/>
1410567-09	MW-9	Water		10/8/2014 13:50	10/9/2014 09:30	<input type="checkbox"/>
1410567-10	Trip Blank	Water		10/8/2014	10/9/2014 09:30	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Work Order:** 1410567

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**Case Narrative**

Batch R150268A sample MW 1 was run at a dilution for BTEX due to high concentrations of target and non target analytes.

Batch R150378 sample MW 1 MS/MSD recoveries for Chloride and Sulfate were below control limits, however, the results in the parent sample were greater than 4x the spiked amount. No qualification is required for Chloride and Sulfate.

Batch R150397 sample MW 2 was run at a dilution for BTEX due to high concentrations of target and non target analytes. One surrogate recovery was high. The samples was non-detect for Toluene. No data requires qualification.

Sample MW 9 had a slightly high GRO surrogate recovery. No data requires qualification.



**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**WorkOrder:** 1410567

## **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

<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: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-1  
**Collection Date:** 10/8/2014 11:23 AM

**Work Order:** 1410567  
**Lab ID:** 1410567-01  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	10/10/2014 01:17 PM
Surr: 4-Terphenyl-d14	102		31-176	%REC	1	10/10/2014 01:17 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	10/10/2014 12:39 PM
Surr: Toluene-d8	96.3		70-130	%REC	1	10/10/2014 12:39 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
Calcium	80		0.50	mg/L	1	10/14/2014 11:42 AM
Iron	0.42		0.080	mg/L	1	10/14/2014 11:42 AM
Magnesium	40		0.20	mg/L	1	10/14/2014 11:42 AM
Manganese	0.0054		0.0050	mg/L	1	10/14/2014 11:42 AM
Potassium	0.98		0.20	mg/L	1	10/14/2014 11:42 AM
Sodium	61		0.20	mg/L	1	10/14/2014 11:42 AM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 12:37 PM
Anthracene	ND		5.0	µg/L	1	10/11/2014 12:37 PM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 12:37 PM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 12:37 PM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 12:37 PM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 12:37 PM
Chrysene	ND		1.0	µg/L	1	10/11/2014 12:37 PM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 12:37 PM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 12:37 PM
Fluorene	ND		5.0	µg/L	1	10/11/2014 12:37 PM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 12:37 PM
Naphthalene	ND		5.0	µg/L	1	10/11/2014 12:37 PM
Pyrene	ND		5.0	µg/L	1	10/11/2014 12:37 PM
Surr: 2-Fluorobiphenyl	98.6		20-140	%REC	1	10/11/2014 12:37 PM
Surr: 4-Terphenyl-d14	147		22-172	%REC	1	10/11/2014 12:37 PM
Surr: Nitrobenzene-d5	50.9		8-140	%REC	1	10/11/2014 12:37 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	10/14/2014 05:52 AM
Ethylbenzene	ND		1.0	µg/L	1	10/14/2014 05:52 AM
m,p-Xylene	ND		2.0	µg/L	1	10/14/2014 05:52 AM
o-Xylene	ND		1.0	µg/L	1	10/14/2014 05:52 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 05:52 AM
Xylenes, Total	ND		3.0	µg/L	1	10/14/2014 05:52 AM
Surr: 1,2-Dichloroethane-d4	95.4		75-120	%REC	1	10/14/2014 05:52 AM

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

**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-1  
**Collection Date:** 10/8/2014 11:23 AM

**Work Order:** 1410567  
**Lab ID:** 1410567-01  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	98.8		80-110	%REC	1	10/14/2014 05:52 AM
Surr: Dibromofluoromethane	98.6		85-115	%REC	1	10/14/2014 05:52 AM
Surr: Toluene-d8	98.2		85-110	%REC	1	10/14/2014 05:52 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	<b>0.10</b>		<b>0.10</b>	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>JJG</b>
Bromide	ND		1.0	mg/L	5	10/15/2014 09:58 AM
Chloride	<b>61</b>		<b>5.0</b>	mg/L	5	10/15/2014 09:58 AM
Sulfate	<b>110</b>		<b>20</b>	mg/L	20	10/15/2014 10:59 AM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	<b>1.3</b>		<b>0.020</b>	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-2  
**Collection Date:** 10/8/2014 02:30 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-02  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>24</b>		<b>0.10</b>	<b>mg/L</b>	1	10/10/2014 03:07 PM
Surr: 4-Terphenyl-d14	108		31-176	%REC	1	10/10/2014 03:07 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>6.4</b>		<b>0.20</b>	<b>mg/L</b>	1	10/10/2014 02:20 PM
Surr: Toluene-d8	118		70-130	%REC	1	10/10/2014 02:20 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>74</b>		<b>0.50</b>	<b>mg/L</b>	1	10/14/2014 12:04 PM
<b>Iron</b>	<b>6.3</b>		<b>0.080</b>	<b>mg/L</b>	1	10/14/2014 12:04 PM
<b>Magnesium</b>	<b>38</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:04 PM
<b>Manganese</b>	<b>0.47</b>		<b>0.0050</b>	<b>mg/L</b>	1	10/14/2014 12:04 PM
<b>Potassium</b>	<b>2.2</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:04 PM
<b>Sodium</b>	<b>83</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:04 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 01:04 AM
Anthracene	ND		5.0	µg/L	1	10/11/2014 01:04 AM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 01:04 AM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 01:04 AM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:04 AM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:04 AM
Chrysene	ND		1.0	µg/L	1	10/11/2014 01:04 AM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 01:04 AM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:04 AM
<b>Fluorene</b>	<b>6.8</b>		<b>5.0</b>	<b>µg/L</b>	1	10/11/2014 01:04 AM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 01:04 AM
<b>Naphthalene</b>	<b>7.5</b>		<b>5.0</b>	<b>µg/L</b>	1	10/11/2014 01:04 AM
Pyrene	ND		5.0	µg/L	1	10/11/2014 01:04 AM
Surr: 2-Fluorobiphenyl	78.3		20-140	%REC	1	10/11/2014 01:04 AM
Surr: 4-Terphenyl-d14	132		22-172	%REC	1	10/11/2014 01:04 AM
Surr: Nitrobenzene-d5	105		8-140	%REC	1	10/11/2014 01:04 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>RS</b>
<b>Benzene</b>	<b>21</b>		<b>10</b>	<b>µg/L</b>	10	10/16/2014 03:16 PM
<b>Ethylbenzene</b>	<b>50</b>		<b>10</b>	<b>µg/L</b>	10	10/16/2014 03:16 PM
<b>m,p-Xylene</b>	<b>530</b>		<b>20</b>	<b>µg/L</b>	10	10/16/2014 03:16 PM
<b>o-Xylene</b>	<b>28</b>		<b>10</b>	<b>µg/L</b>	10	10/16/2014 03:16 PM
Toluene	ND		10	µg/L	10	10/16/2014 03:16 PM
<b>Xylenes, Total</b>	<b>560</b>		<b>30</b>	<b>µg/L</b>	10	10/16/2014 03:16 PM
Surr: 1,2-Dichloroethane-d4	99.6		75-120	%REC	10	10/16/2014 03:16 PM

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



**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-2  
**Collection Date:** 10/8/2014 02:30 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-02  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	95.3		80-110	%REC	10	10/16/2014 03:16 PM
Surr: Dibromofluoromethane	98.2		85-115	%REC	10	10/16/2014 03:16 PM
Surr: Toluene-d8	110	S	85-110	%REC	10	10/16/2014 03:16 PM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	0.11		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Bromide	0.37		0.20	mg/L	1	10/19/2014 09:03 PM
Chloride	53		5.0	mg/L	5	10/15/2014 11:59 AM
Sulfate	18		5.0	mg/L	5	10/15/2014 11:59 AM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	0.023		0.020	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-3  
**Collection Date:** 10/8/2014 12:55 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-03  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>7.9</b>		<b>0.10</b>	<b>mg/L</b>	1	10/10/2014 03:34 PM
Surr: 4-Terphenyl-d14	112		31-176	%REC	1	10/10/2014 03:34 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>1.4</b>		<b>0.20</b>	<b>mg/L</b>	1	10/10/2014 02:46 PM
Surr: Toluene-d8	124		70-130	%REC	1	10/10/2014 02:46 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>94</b>		<b>0.50</b>	<b>mg/L</b>	1	10/14/2014 12:10 PM
<b>Iron</b>	<b>0.67</b>		<b>0.080</b>	<b>mg/L</b>	1	10/14/2014 12:10 PM
<b>Magnesium</b>	<b>45</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:10 PM
<b>Manganese</b>	<b>0.94</b>		<b>0.0050</b>	<b>mg/L</b>	1	10/14/2014 12:10 PM
<b>Potassium</b>	<b>1.0</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:10 PM
<b>Sodium</b>	<b>83</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:10 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 01:31 AM
Anthracene	ND		5.0	µg/L	1	10/11/2014 01:31 AM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 01:31 AM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 01:31 AM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:31 AM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:31 AM
Chrysene	ND		1.0	µg/L	1	10/11/2014 01:31 AM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 01:31 AM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:31 AM
Fluorene	ND		5.0	µg/L	1	10/11/2014 01:31 AM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 01:31 AM
Naphthalene	ND		5.0	µg/L	1	10/11/2014 01:31 AM
Pyrene	ND		5.0	µg/L	1	10/11/2014 01:31 AM
Surr: 2-Fluorobiphenyl	95.7		20-140	%REC	1	10/11/2014 01:31 AM
Surr: 4-Terphenyl-d14	145		22-172	%REC	1	10/11/2014 01:31 AM
Surr: Nitrobenzene-d5	73.2		8-140	%REC	1	10/11/2014 01:31 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>AK</b>
<b>Benzene</b>	<b>23</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 06:16 AM
<b>Ethylbenzene</b>	<b>5.4</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 06:16 AM
<b>m,p-Xylene</b>	<b>3.2</b>		<b>2.0</b>	<b>µg/L</b>	1	10/14/2014 06:16 AM
o-Xylene	ND		1.0	µg/L	1	10/14/2014 06:16 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 06:16 AM
<b>Xylenes, Total</b>	<b>3.2</b>		<b>3.0</b>	<b>µg/L</b>	1	10/14/2014 06:16 AM
Surr: 1,2-Dichloroethane-d4	93.6		75-120	%REC	1	10/14/2014 06:16 AM

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

**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-3  
**Collection Date:** 10/8/2014 12:55 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-03  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 4-Bromofluorobenzene</i>	97.4		80-110	%REC	1	10/14/2014 06:16 AM
<i>Surr: Dibromofluoromethane</i>	97.6		85-115	%REC	1	10/14/2014 06:16 AM
<i>Surr: Toluene-d8</i>	107		85-110	%REC	1	10/14/2014 06:16 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	ND		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
<b>Bromide</b>	<b>0.85</b>		<b>0.20</b>	<b>mg/L</b>	1	10/19/2014 09:23 PM
<b>Chloride</b>	<b>99</b>		<b>30</b>	<b>mg/L</b>	30	10/15/2014 01:41 PM
<b>Sulfate</b>	<b>35</b>		<b>5.0</b>	<b>mg/L</b>	5	10/15/2014 12:40 PM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-4  
**Collection Date:** 10/8/2014 12:30 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-04  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>3.3</b>		<b>0.10</b>	<b>mg/L</b>	1	10/10/2014 04:29 PM
Surr: 4-Terphenyl-d14	108		31-176	%REC	1	10/10/2014 04:29 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>0.33</b>		<b>0.20</b>	<b>mg/L</b>	1	10/10/2014 03:11 PM
Surr: Toluene-d8	106		70-130	%REC	1	10/10/2014 03:11 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>83</b>		<b>0.50</b>	<b>mg/L</b>	1	10/14/2014 12:16 PM
<b>Iron</b>	<b>0.47</b>		<b>0.080</b>	<b>mg/L</b>	1	10/14/2014 12:16 PM
<b>Magnesium</b>	<b>39</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:16 PM
<b>Manganese</b>	<b>1.5</b>		<b>0.0050</b>	<b>mg/L</b>	1	10/14/2014 12:16 PM
<b>Potassium</b>	<b>0.89</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:16 PM
<b>Sodium</b>	<b>76</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:16 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 01:58 AM
Anthracene	ND		5.0	µg/L	1	10/11/2014 01:58 AM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 01:58 AM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 01:58 AM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:58 AM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:58 AM
Chrysene	ND		1.0	µg/L	1	10/11/2014 01:58 AM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 01:58 AM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 01:58 AM
Fluorene	ND		5.0	µg/L	1	10/11/2014 01:58 AM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 01:58 AM
Naphthalene	ND		5.0	µg/L	1	10/11/2014 01:58 AM
Pyrene	ND		5.0	µg/L	1	10/11/2014 01:58 AM
Surr: 2-Fluorobiphenyl	103		20-140	%REC	1	10/11/2014 01:58 AM
Surr: 4-Terphenyl-d14	145		22-172	%REC	1	10/11/2014 01:58 AM
Surr: Nitrobenzene-d5	62.4		8-140	%REC	1	10/11/2014 01:58 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
<b>Benzene</b>	<b>4.9</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 06:41 AM
Ethylbenzene	ND		1.0	µg/L	1	10/14/2014 06:41 AM
m,p-Xylene	ND		2.0	µg/L	1	10/14/2014 06:41 AM
o-Xylene	ND		1.0	µg/L	1	10/14/2014 06:41 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 06:41 AM
Xylenes, Total	ND		3.0	µg/L	1	10/14/2014 06:41 AM
Surr: 1,2-Dichloroethane-d4	94.3		75-120	%REC	1	10/14/2014 06:41 AM

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



**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-4  
**Collection Date:** 10/8/2014 12:30 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-04  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	102		80-110	%REC	1	10/14/2014 06:41 AM
Surr: Dibromofluoromethane	96.4		85-115	%REC	1	10/14/2014 06:41 AM
Surr: Toluene-d8	104		85-110	%REC	1	10/14/2014 06:41 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	ND		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Bromide	0.47		0.20	mg/L	1	10/19/2014 09:44 PM
Chloride	74		5.0	mg/L	5	10/15/2014 02:01 PM
Sulfate	43		5.0	mg/L	5	10/15/2014 02:01 PM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-5  
**Collection Date:** 10/8/2014 01:10 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-05  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>3.0</b>		<b>0.10</b>	<b>mg/L</b>	1	10/10/2014 04:57 PM
Surr: 4-Terphenyl-d14	97.3		31-176	%REC	1	10/10/2014 04:57 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>0.20</b>	<b>mg/L</b>	1	10/10/2014 03:36 PM
Surr: Toluene-d8	97.1		70-130	%REC	1	10/10/2014 03:36 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>65</b>		<b>0.50</b>	<b>mg/L</b>	1	10/14/2014 12:21 PM
<b>Iron</b>	<b>0.90</b>		<b>0.080</b>	<b>mg/L</b>	1	10/14/2014 12:21 PM
<b>Magnesium</b>	<b>32</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:21 PM
<b>Manganese</b>	<b>0.036</b>		<b>0.0050</b>	<b>mg/L</b>	1	10/14/2014 12:21 PM
<b>Potassium</b>	<b>1.2</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:21 PM
<b>Sodium</b>	<b>80</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:21 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 02:26 AM
Anthracene	ND		5.0	µg/L	1	10/11/2014 02:26 AM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 02:26 AM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 02:26 AM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 02:26 AM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 02:26 AM
Chrysene	ND		1.0	µg/L	1	10/11/2014 02:26 AM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 02:26 AM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 02:26 AM
Fluorene	ND		5.0	µg/L	1	10/11/2014 02:26 AM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 02:26 AM
Naphthalene	ND		5.0	µg/L	1	10/11/2014 02:26 AM
Pyrene	ND		5.0	µg/L	1	10/11/2014 02:26 AM
Surr: 2-Fluorobiphenyl	102		20-140	%REC	1	10/11/2014 02:26 AM
Surr: 4-Terphenyl-d14	134		22-172	%REC	1	10/11/2014 02:26 AM
Surr: Nitrobenzene-d5	55.3		8-140	%REC	1	10/11/2014 02:26 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	10/14/2014 07:05 AM
Ethylbenzene	ND		1.0	µg/L	1	10/14/2014 07:05 AM
m,p-Xylene	ND		2.0	µg/L	1	10/14/2014 07:05 AM
o-Xylene	ND		1.0	µg/L	1	10/14/2014 07:05 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 07:05 AM
Xylenes, Total	ND		3.0	µg/L	1	10/14/2014 07:05 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	10/14/2014 07:05 AM

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

**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-5  
**Collection Date:** 10/8/2014 01:10 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-05  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 4-Bromofluorobenzene</i>	97.6		80-110	%REC	1	10/14/2014 07:05 AM
<i>Surr: Dibromofluoromethane</i>	106		85-115	%REC	1	10/14/2014 07:05 AM
<i>Surr: Toluene-d8</i>	99.2		85-110	%REC	1	10/14/2014 07:05 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	ND		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Bromide	0.27		0.20	mg/L	1	10/19/2014 10:04 PM
Chloride	29		5.0	mg/L	5	10/15/2014 02:41 PM
Sulfate	100		30	mg/L	30	10/15/2014 03:02 PM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	0.028		0.020	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-6  
**Collection Date:** 10/8/2014 11:50 AM

**Work Order:** 1410567  
**Lab ID:** 1410567-06  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>1.7</b>		<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
Surr: 4-Terphenyl-d14	63.3		31-176	%REC	1	10/10/2014 05:25 PM
					1	10/10/2014 05:25 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015</b>			Analyst: <b>IT</b>
Surr: Toluene-d8	100		70-130	%REC	1	10/10/2014 04:26 PM
					1	10/10/2014 04:26 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
<b>Calcium</b>	<b>76</b>		<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Iron</b>	<b>1.5</b>		<b>0.50</b>	mg/L	1	10/14/2014 12:44 PM
<b>Magnesium</b>	<b>35</b>		<b>0.080</b>	mg/L	1	10/14/2014 12:44 PM
<b>Manganese</b>	<b>0.70</b>		<b>0.20</b>	mg/L	1	10/14/2014 12:44 PM
<b>Potassium</b>	<b>1.4</b>		<b>0.0050</b>	mg/L	1	10/14/2014 12:44 PM
<b>Sodium</b>	<b>70</b>		<b>0.20</b>	mg/L	1	10/14/2014 12:44 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>Acenaphthene</b>	<b>ND</b>		<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Anthracene	ND		7.5	µg/L	1	10/11/2014 02:53 AM
Benzo(a)anthracene	ND		7.5	µg/L	1	10/11/2014 02:53 AM
Benzo(a)pyrene	ND		1.5	µg/L	1	10/11/2014 02:53 AM
Benzo(b)fluoranthene	ND		1.5	µg/L	1	10/11/2014 02:53 AM
Benzo(k)fluoranthene	ND		1.5	µg/L	1	10/11/2014 02:53 AM
Chrysene	ND		1.5	µg/L	1	10/11/2014 02:53 AM
Dibenzo(a,h)anthracene	ND		1.5	µg/L	1	10/11/2014 02:53 AM
Fluoranthene	ND		3.0	µg/L	1	10/11/2014 02:53 AM
Fluorene	ND		1.5	µg/L	1	10/11/2014 02:53 AM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/L	1	10/11/2014 02:53 AM
Naphthalene	ND		3.0	µg/L	1	10/11/2014 02:53 AM
Pyrene	ND		7.5	µg/L	1	10/11/2014 02:53 AM
Surr: 2-Fluorobiphenyl	74.2		20-140	%REC	1	10/11/2014 02:53 AM
Surr: 4-Terphenyl-d14	60.8		22-172	%REC	1	10/11/2014 02:53 AM
Surr: Nitrobenzene-d5	50.5		8-140	%REC	1	10/11/2014 02:53 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
<b>Benzene</b>	<b>ND</b>		<b>SW8260</b>			Analyst: <b>AK</b>
Ethylbenzene	ND		1.0	µg/L	1	10/14/2014 07:29 AM
m,p-Xylene	ND		1.0	µg/L	1	10/14/2014 07:29 AM
o-Xylene	ND		2.0	µg/L	1	10/14/2014 07:29 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 07:29 AM
Xylenes, Total	ND		1.0	µg/L	1	10/14/2014 07:29 AM
Surr: 1,2-Dichloroethane-d4	92.1		3.0	µg/L	1	10/14/2014 07:29 AM
			75-120	%REC	1	10/14/2014 07:29 AM

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



**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-6  
**Collection Date:** 10/8/2014 11:50 AM

**Work Order:** 1410567  
**Lab ID:** 1410567-06  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 4-Bromofluorobenzene</i>	100		80-110	%REC	1	10/14/2014 07:29 AM
<i>Surr: Dibromofluoromethane</i>	98.3		85-115	%REC	1	10/14/2014 07:29 AM
<i>Surr: Toluene-d8</i>	101		85-110	%REC	1	10/14/2014 07:29 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	ND		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
<b>Bromide</b>	<b>0.34</b>		<b>0.20</b>	<b>mg/L</b>	1	10/19/2014 10:24 PM
<b>Chloride</b>	<b>47</b>		<b>5.0</b>	<b>mg/L</b>	5	10/15/2014 03:22 PM
<b>Sulfate</b>	<b>71</b>		<b>5.0</b>	<b>mg/L</b>	5	10/15/2014 03:22 PM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-7  
**Collection Date:** 10/8/2014 12:10 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-07  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>1.5</b>		<b>0.10</b>	<b>mg/L</b>	<b>1</b>	10/10/2014 05:52 PM
Surr: 4-Terphenyl-d14	86.8		31-176	%REC	1	10/10/2014 05:52 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>0.20</b>	<b>mg/L</b>	<b>1</b>	10/10/2014 04:51 PM
Surr: Toluene-d8	95.9		70-130	%REC	1	10/10/2014 04:51 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>70</b>		<b>0.50</b>	<b>mg/L</b>	<b>1</b>	10/14/2014 12:49 PM
<b>Iron</b>	<b>0.19</b>		<b>0.080</b>	<b>mg/L</b>	<b>1</b>	10/14/2014 12:49 PM
<b>Magnesium</b>	<b>34</b>		<b>0.20</b>	<b>mg/L</b>	<b>1</b>	10/14/2014 12:49 PM
<b>Manganese</b>	<b>0.50</b>		<b>0.0050</b>	<b>mg/L</b>	<b>1</b>	10/14/2014 12:49 PM
<b>Potassium</b>	<b>0.86</b>		<b>0.20</b>	<b>mg/L</b>	<b>1</b>	10/14/2014 12:49 PM
<b>Sodium</b>	<b>78</b>		<b>0.20</b>	<b>mg/L</b>	<b>1</b>	10/14/2014 12:49 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 03:20 AM
Anthracene	ND		5.0	µg/L	1	10/11/2014 03:20 AM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 03:20 AM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 03:20 AM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 03:20 AM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 03:20 AM
Chrysene	ND		1.0	µg/L	1	10/11/2014 03:20 AM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 03:20 AM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 03:20 AM
Fluorene	ND		5.0	µg/L	1	10/11/2014 03:20 AM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 03:20 AM
Naphthalene	ND		5.0	µg/L	1	10/11/2014 03:20 AM
Pyrene	ND		5.0	µg/L	1	10/11/2014 03:20 AM
Surr: 2-Fluorobiphenyl	92.4		20-140	%REC	1	10/11/2014 03:20 AM
Surr: 4-Terphenyl-d14	97.3		22-172	%REC	1	10/11/2014 03:20 AM
Surr: Nitrobenzene-d5	50.8		8-140	%REC	1	10/11/2014 03:20 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	10/14/2014 07:54 AM
Ethylbenzene	ND		1.0	µg/L	1	10/14/2014 07:54 AM
m,p-Xylene	ND		2.0	µg/L	1	10/14/2014 07:54 AM
o-Xylene	ND		1.0	µg/L	1	10/14/2014 07:54 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 07:54 AM
Xylenes, Total	ND		3.0	µg/L	1	10/14/2014 07:54 AM
Surr: 1,2-Dichloroethane-d4	93.2		75-120	%REC	1	10/14/2014 07:54 AM

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

**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-7  
**Collection Date:** 10/8/2014 12:10 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-07  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 4-Bromofluorobenzene</i>	98.0		80-110	%REC	1	10/14/2014 07:54 AM
<i>Surr: Dibromofluoromethane</i>	96.8		85-115	%REC	1	10/14/2014 07:54 AM
<i>Surr: Toluene-d8</i>	99.0		85-110	%REC	1	10/14/2014 07:54 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	ND		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Bromide	0.35		0.20	mg/L	1	10/19/2014 10:44 PM
Chloride	44		5.0	mg/L	5	10/15/2014 04:02 PM
Sulfate	44		5.0	mg/L	5	10/15/2014 04:02 PM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-8  
**Collection Date:** 10/8/2014 01:35 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-08  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>1.4</b>		<b>0.10</b>	<b>mg/L</b>	1	10/10/2014 06:20 PM
Surr: 4-Terphenyl-d14	98.9		31-176	%REC	1	10/10/2014 06:20 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>0.24</b>		<b>0.20</b>	<b>mg/L</b>	1	10/10/2014 05:16 PM
Surr: Toluene-d8	99.6		70-130	%REC	1	10/10/2014 05:16 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>76</b>		<b>0.50</b>	<b>mg/L</b>	1	10/14/2014 12:55 PM
<b>Iron</b>	<b>3.5</b>		<b>0.080</b>	<b>mg/L</b>	1	10/14/2014 12:55 PM
<b>Magnesium</b>	<b>38</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:55 PM
<b>Manganese</b>	<b>0.23</b>		<b>0.0050</b>	<b>mg/L</b>	1	10/14/2014 12:55 PM
<b>Potassium</b>	<b>2.0</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:55 PM
<b>Sodium</b>	<b>65</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 12:55 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 03:48 AM
Anthracene	ND		5.0	µg/L	1	10/11/2014 03:48 AM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 03:48 AM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 03:48 AM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 03:48 AM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 03:48 AM
Chrysene	ND		1.0	µg/L	1	10/11/2014 03:48 AM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 03:48 AM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 03:48 AM
Fluorene	ND		5.0	µg/L	1	10/11/2014 03:48 AM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 03:48 AM
Naphthalene	ND		5.0	µg/L	1	10/11/2014 03:48 AM
Pyrene	ND		5.0	µg/L	1	10/11/2014 03:48 AM
Surr: 2-Fluorobiphenyl	108		20-140	%REC	1	10/11/2014 03:48 AM
Surr: 4-Terphenyl-d14	135		22-172	%REC	1	10/11/2014 03:48 AM
Surr: Nitrobenzene-d5	47.9		8-140	%REC	1	10/11/2014 03:48 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>AK</b>
<b>Benzene</b>	<b>9.2</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 08:19 AM
<b>Ethylbenzene</b>	<b>2.0</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 08:19 AM
<b>m,p-Xylene</b>	<b>25</b>		<b>2.0</b>	<b>µg/L</b>	1	10/14/2014 08:19 AM
o-Xylene	ND		1.0	µg/L	1	10/14/2014 08:19 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 08:19 AM
<b>Xylenes, Total</b>	<b>25</b>		<b>3.0</b>	<b>µg/L</b>	1	10/14/2014 08:19 AM
Surr: 1,2-Dichloroethane-d4	95.1		75-120	%REC	1	10/14/2014 08:19 AM

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

**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-8  
**Collection Date:** 10/8/2014 01:35 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-08  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	100		80-110	%REC	1	10/14/2014 08:19 AM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	10/14/2014 08:19 AM
Surr: Toluene-d8	101		85-110	%REC	1	10/14/2014 08:19 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	ND		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Bromide	0.41		0.20	mg/L	1	10/19/2014 11:04 PM
Chloride	56		5.0	mg/L	5	10/15/2014 04:43 PM
Sulfate	78		5.0	mg/L	5	10/15/2014 04:43 PM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	1.0		0.020	mg/L	1	10/13/2014 02:46 PM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-9  
**Collection Date:** 10/8/2014 01:50 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-09  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 10/10/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>3.5</b>		<b>0.10</b>	<b>mg/L</b>	1	10/10/2014 09:32 PM
Surr: 4-Terphenyl-d14	107		31-176	%REC	1	10/10/2014 09:32 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>3.8</b>		<b>0.20</b>	<b>mg/L</b>	1	10/10/2014 05:42 PM
Surr: Toluene-d8	132	S	70-130	%REC	1	10/10/2014 05:42 PM
<b>METALS ANALYSIS BY ICP (DISSOLVED)</b>						
			<b>SW846 6010C</b>		Prep: FILTER / 10/14/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>68</b>		<b>0.50</b>	<b>mg/L</b>	1	10/14/2014 01:00 PM
<b>Iron</b>	<b>1.1</b>		<b>0.080</b>	<b>mg/L</b>	1	10/14/2014 01:00 PM
<b>Magnesium</b>	<b>35</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 01:00 PM
<b>Manganese</b>	<b>0.44</b>		<b>0.0050</b>	<b>mg/L</b>	1	10/14/2014 01:00 PM
<b>Potassium</b>	<b>1.5</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 01:00 PM
<b>Sodium</b>	<b>130</b>		<b>0.20</b>	<b>mg/L</b>	1	10/14/2014 01:00 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep: SW3511 / 10/10/14	Analyst: <b>RM</b>
Acenaphthene	ND		5.0	µg/L	1	10/11/2014 04:15 AM
Anthracene	ND		5.0	µg/L	1	10/11/2014 04:15 AM
Benzo(a)anthracene	ND		1.0	µg/L	1	10/11/2014 04:15 AM
Benzo(a)pyrene	ND		1.0	µg/L	1	10/11/2014 04:15 AM
Benzo(b)fluoranthene	ND		1.0	µg/L	1	10/11/2014 04:15 AM
Benzo(k)fluoranthene	ND		1.0	µg/L	1	10/11/2014 04:15 AM
Chrysene	ND		1.0	µg/L	1	10/11/2014 04:15 AM
Dibenzo(a,h)anthracene	ND		2.0	µg/L	1	10/11/2014 04:15 AM
Fluoranthene	ND		1.0	µg/L	1	10/11/2014 04:15 AM
Fluorene	ND		5.0	µg/L	1	10/11/2014 04:15 AM
Indeno(1,2,3-cd)pyrene	ND		2.0	µg/L	1	10/11/2014 04:15 AM
<b>Naphthalene</b>	<b>6.1</b>		<b>5.0</b>	<b>µg/L</b>	1	10/11/2014 04:15 AM
Pyrene	ND		5.0	µg/L	1	10/11/2014 04:15 AM
Surr: 2-Fluorobiphenyl	97.3		20-140	%REC	1	10/11/2014 04:15 AM
Surr: 4-Terphenyl-d14	146		22-172	%REC	1	10/11/2014 04:15 AM
Surr: Nitrobenzene-d5	70.6		8-140	%REC	1	10/11/2014 04:15 AM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>AK</b>
<b>Benzene</b>	<b>62</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 08:43 AM
<b>Ethylbenzene</b>	<b>51</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 08:43 AM
<b>m,p-Xylene</b>	<b>660</b>		<b>20</b>	<b>µg/L</b>	10	10/15/2014 02:13 AM
<b>o-Xylene</b>	<b>39</b>		<b>1.0</b>	<b>µg/L</b>	1	10/14/2014 08:43 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 08:43 AM
<b>Xylenes, Total</b>	<b>700</b>		<b>30</b>	<b>µg/L</b>	10	10/15/2014 02:13 AM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	10	10/15/2014 02:13 AM

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

# ALS Group USA, Corp

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** MW-9  
**Collection Date:** 10/8/2014 01:50 PM

**Work Order:** 1410567  
**Lab ID:** 1410567-09  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 1,2-Dichloroethane-d4</i>	93.0		75-120	%REC	1	10/14/2014 08:43 AM
<i>Surr: 4-Bromofluorobenzene</i>	98.3		80-110	%REC	10	10/15/2014 02:13 AM
<i>Surr: 4-Bromofluorobenzene</i>	94.6		80-110	%REC	1	10/14/2014 08:43 AM
<i>Surr: Dibromofluoromethane</i>	102		85-115	%REC	10	10/15/2014 02:13 AM
<i>Surr: Dibromofluoromethane</i>	98.0		85-115	%REC	1	10/14/2014 08:43 AM
<i>Surr: Toluene-d8</i>	96.2		85-110	%REC	10	10/15/2014 02:13 AM
<i>Surr: Toluene-d8</i>	97.0		85-110	%REC	1	10/14/2014 08:43 AM
<b>FLUORIDE</b>			<b>A4500-F C</b>			Analyst: <b>EE</b>
Fluoride	0.11		0.10	mg/L	1	10/14/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>JJG</b>
Bromide	1.1		1.0	mg/L	5	10/15/2014 06:04 PM
Chloride	140		30	mg/L	30	10/15/2014 06:24 PM
Sulfate	29		5.0	mg/L	5	10/15/2014 06:04 PM
<b>NITROGEN, NITRATE-NITRITE</b>			<b>E353.2 R2.0</b>			Analyst: <b>JJG</b>
Nitrogen, Nitrate-Nitrite	0.033		0.020	mg/L	1	10/13/2014 02:46 PM

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

**ALS Group USA, Corp**

Date: 21-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14  
**Sample ID:** Trip Blank  
**Collection Date:** 10/8/2014

**Work Order:** 1410567  
**Lab ID:** 1410567-10  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	10/14/2014 02:12 AM
Ethylbenzene	ND		1.0	µg/L	1	10/14/2014 02:12 AM
m,p-Xylene	ND		2.0	µg/L	1	10/14/2014 02:12 AM
o-Xylene	ND		1.0	µg/L	1	10/14/2014 02:12 AM
Toluene	ND		1.0	µg/L	1	10/14/2014 02:12 AM
Xylenes, Total	ND		3.0	µg/L	1	10/14/2014 02:12 AM
Surr: 1,2-Dichloroethane-d4	99.7		75-120	%REC	1	10/14/2014 02:12 AM
Surr: 4-Bromofluorobenzene	88.7		80-110	%REC	1	10/14/2014 02:12 AM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	10/14/2014 02:12 AM
Surr: Toluene-d8	98.0		85-110	%REC	1	10/14/2014 02:12 AM

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



Client: HRL Compliance Solutions, Inc

## QC BATCH REPORT

Work Order: 1410567

Project: WPX TR 31-5-697 Quarterly MW 10.8.14

Batch ID: 63765

Instrument ID GC8

Method: SW8015M

<b>MBLK</b>		Sample ID: <b>DBLKW1-63765-63765</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/10/2014 11:27 AM</b>		
Client ID:		Run ID: <b>GC8_141010B</b>				SeqNo: <b>2976951</b>		Prep Date: <b>10/10/2014</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	0.1259	0	0.1143	0	110	31-176	0			

<b>LCS</b>		Sample ID: <b>DLCSW1-63765-63765</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/10/2014 11:54 AM</b>		
Client ID:		Run ID: <b>GC8_141010B</b>				SeqNo: <b>2976952</b>		Prep Date: <b>10/10/2014</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)	6.998	0.10	11.43	0	61.2	35-95	0			
Surr: 4-Terphenyl-d14	0.1291	0	0.1143	0	113	31-176	0			

<b>MS</b>		Sample ID: <b>1410567-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/10/2014 12:22 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>GC8_141010B</b>				SeqNo: <b>2976953</b>		Prep Date: <b>10/10/2014</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)	24.82	0.35	40	0	62	29-96	0			
Surr: 4-Terphenyl-d14	0.4033	0	0.4	0	101	31-176	0			

<b>MSD</b>		Sample ID: <b>1410567-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/10/2014 12:49 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>GC8_141010B</b>				SeqNo: <b>2976954</b>		Prep Date: <b>10/10/2014</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)	23.27	0.35	40	0	58.2	29-96	24.82	6.41	30	
Surr: 4-Terphenyl-d14	0.4522	0	0.4	0	113	31-176	0.4033	11.4	30	

The following samples were analyzed in this batch:

1410567-01B	1410567-02B	1410567-03B
1410567-04B	1410567-05B	1410567-06B
1410567-07B	1410567-08B	1410567-09B

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1410567  
 Project: WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150127** Instrument ID **GC9** Method: **SW8015**

<b>MBLK</b>		Sample ID: <b>GBLKW1-141010-R150127</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/10/2014 12:14 PM</b>		
Client ID:		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978477</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	110.4	0	100	0	110	70-130	0			

<b>LCS</b>		Sample ID: <b>GLCSW1-141010-R150127</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/10/2014 11:49 AM</b>		
Client ID:		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978476</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)	8792	200	10000	0	87.9	70-130	0			
Surr: Toluene-d8	111.1	0	100	0	111	70-130	0			

<b>MS</b>		Sample ID: <b>1410567-01A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/10/2014 06:07 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978497</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)	8939	200	10000	0	89.4	70-130	0			
Surr: Toluene-d8	108.4	0	100	0	108	70-130	0			

<b>MSD</b>		Sample ID: <b>1410567-01A MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/10/2014 06:32 PM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978498</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)	8745	200	10000	0	87.5	70-130	8939	2.19	30	
Surr: Toluene-d8	105	0	100	0	105	70-130	108.4	3.21	30	

The following samples were analyzed in this batch:

1410567-01A	1410567-02A	1410567-03A
1410567-04A	1410567-05A	1410567-06A
1410567-07A	1410567-08A	1410567-09A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **63888** Instrument ID **ICP2** Method: **SW846 6010C (Dissolve)**

Sample ID: <b>MBLK-63888-63888</b>				Units: <b>mg/L</b>			Analysis Date: <b>10/14/2014 11:31 AM</b>			
Client ID:		Run ID: <b>ICP2_141014A</b>			SeqNo: <b>2980547</b>		Prep Date: <b>10/14/2014</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	0.04508	0.20								J

LCS		Sample ID: LCS-63888-63888					Units:mg/L		Analysis Date: 10/14/2014 11:37 AM		
Client ID:			Run ID: ICP2_141014A			SeqNo:2980548		Prep Date: 10/14/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Calcium	8.879	0.50	10	0	88.8	80-120	0				
Iron	9.035	0.080	10	0	90.3	80-120	0				
Magnesium	9.126	0.20	10	0	91.3	80-120	0				
Manganese	0.09305	0.0050	0.1	0	93.1	80-120	0				
Potassium	9.001	0.20	10	0	90	80-120	0				
Sodium	9.349	0.20	10	0	93.5	80-120	0				

The following samples were analyzed in this batch:

1410567-01C	1410567-02C	1410567-03C
1410567-04C	1410567-05C	1410567-06C
1410567-07C	1410567-08C	1410567-09C

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **63728**      Instrument ID **SVMS7**      Method: **SW8270**

MBLK		Sample ID: <b>SBLKW1-63728-63728</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/10/2014 06:42 PM</b>		
Client ID:		Run ID: <b>SVMS7_141010A</b>				SeqNo: <b>2979167</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	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(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								
Pyrene	ND	5.0								
<i>Surr: 2-Fluorobiphenyl</i>	44.64	0	114	0	39.2	20-140	0			
<i>Surr: 4-Terphenyl-d14</i>	79.18	0	114	0	69.5	22-172	0			
<i>Surr: Nitrobenzene-d5</i>	36.14	0	114	0	31.7	8-140	0			

LCS		Sample ID: <b>SLCSW1-63728-63728</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/10/2014 07:10 PM</b>		
Client ID:		Run ID: <b>SVMS7_141010A</b>				SeqNo: <b>2979168</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	43.66	5.0	45.7	0	95.5	60-140	0			
Anthracene	42.93	5.0	45.7	0	93.9	60-140	0			
Benzo(a)anthracene	36.09	5.0	45.7	0	79	60-140	0			
Benzo(a)pyrene	44.18	5.0	45.7	0	96.7	60-140	0			
Benzo(b)fluoranthene	48.8	5.0	45.7	0	107	60-140	0			
Benzo(k)fluoranthene	45.6	5.0	45.7	0	99.8	60-140	0			
Chrysene	42.63	5.0	45.7	0	93.3	60-140	0			
Dibenzo(a,h)anthracene	42.56	5.0	45.7	0	93.1	60-140	0			
Fluoranthene	47.63	5.0	45.7	0	104	60-140	0			
Fluorene	30.17	5.0	45.7	0	66	60-140	0			
Indeno(1,2,3-cd)pyrene	41.78	5.0	45.7	0	91.4	60-140	0			
Naphthalene	30.4	5.0	45.7	0	66.5	40-140	0			
Pyrene	49.55	5.0	45.7	0	108	60-140	0			
<i>Surr: 2-Fluorobiphenyl</i>	127.6	0	114	0	112	20-140	0			
<i>Surr: 4-Terphenyl-d14</i>	140.8	0	114	0	124	22-172	0			
<i>Surr: Nitrobenzene-d5</i>	82.19	0	114	0	72.1	8-140	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1410567  
 Project: WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: 63728 Instrument ID SVMS7 Method: SW8270

MS				Sample ID: 1410407-01B MS			Units: µg/L		Analysis Date: 10/10/2014 07:37 PM		
Client ID:			Run ID: SVMS7_141010A			SeqNo: 2979169		Prep Date: 10/10/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	42.54	5.0	45.7	0	93.1	60-140	0				
Anthracene	42.81	5.0	45.7	0	93.7	60-140	0				
Benzo(a)anthracene	37.78	5.0	45.7	0	82.7	60-140	0				
Benzo(a)pyrene	43.57	5.0	45.7	0	95.3	60-140	0				
Benzo(b)fluoranthene	49.62	5.0	45.7	0	109	60-140	0				
Benzo(k)fluoranthene	46.65	5.0	45.7	0	102	60-140	0				
Chrysene	44.55	5.0	45.7	0	97.5	60-140	0				
Dibenzo(a,h)anthracene	42.81	5.0	45.7	0	93.7	60-140	0				
Fluoranthene	52.32	5.0	45.7	0	114	60-140	0				
Fluorene	30.51	5.0	45.7	0	66.8	60-140	0				
Indeno(1,2,3-cd)pyrene	45.26	5.0	45.7	0	99	60-140	0				
Naphthalene	31.34	5.0	45.7	0	68.6	40-140	0				
Pyrene	54.99	5.0	45.7	0	120	60-140	0				
Surr: 2-Fluorobiphenyl	116	0	114	0	102	20-140	0				
Surr: 4-Terphenyl-d14	130	0	114	0	114	22-172	0				
Surr: Nitrobenzene-d5	77.69	0	114	0	68.2	8-140	0				

MSD				Sample ID: 1410407-01B MSD			Units: µg/L		Analysis Date: 10/10/2014 08:04 PM		
Client ID:			Run ID: SVMS7_141010A			SeqNo:2979170		Prep Date: 10/10/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	42.63	5.0	45.7	0	93.3	60-140	42.54	0.215	30		
Anthracene	45.42	5.0	45.7	0	99.4	60-140	42.81	5.91	30		
Benzo(a)anthracene	38.65	5.0	45.7	0	84.6	60-140	37.78	2.27	30		
Benzo(a)pyrene	46.38	5.0	45.7	0	101	60-140	43.57	6.25	30		
Benzo(b)fluoranthene	47.38	5.0	45.7	0	104	60-140	49.62	4.62	30		
Benzo(k)fluoranthene	52.91	5.0	45.7	0	116	60-140	46.65	12.6	30		
Chrysene	44.5	5.0	45.7	0	97.4	60-140	44.55	0.103	30		
Dibenzo(a,h)anthracene	39.61	5.0	45.7	0	86.7	60-140	42.81	7.76	30		
Fluoranthene	54.15	5.0	45.7	0	118	60-140	52.32	3.43	30		
Fluorene	31.63	5.0	45.7	0	69.2	60-140	30.51	3.6	30		
Indeno(1,2,3-cd)pyrene	44.64	5.0	45.7	0	97.7	60-140	45.26	1.37	30		
Naphthalene	32.32	5.0	45.7	0	70.7	40-140	31.34	3.09	30		
Pyrene	56.43	5.0	45.7	0	123	60-140	54.99	2.58	30		
Surr: 2-Fluorobiphenyl	125.6	0	114	0	110	20-140	116	7.93	30		
Surr: 4-Terphenyl-d14	137.3	0	114	0	120	22-172	130	5.47	30		
Surr: Nitrobenzene-d5	83.2	0	114	0	73	8-140	77.69	6.85	30		

The following samples were analyzed in this batch:

1410567-01B	1410567-02B	1410567-03B
1410567-04B	1410567-05B	1410567-06B
1410567-07B	1410567-08B	1410567-09B

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1410567  
 Project: WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150188A** Instrument ID **VMS8** Method: **SW8260**

MBLK				Sample ID: VBLKW2-141013-R150188A				Units: µg/L		Analysis Date: 10/14/2014 12:58 PM	
Client ID:			Run ID: VMS8_141013B			SeqNo:2980393		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	18.95	0	20	0	94.8	75-120	0				
Surr: 4-Bromofluorobenzene	19.61	0	20	0	98	80-110	0				
Surr: Dibromofluoromethane	19.24	0	20	0	96.2	85-115	0				
Surr: Toluene-d8	19.55	0	20	0	97.8	85-110	0				

LCS				Sample ID: VLCSW3-141013-R150188A				Units: µg/L		Analysis Date: 10/13/2014 11:44 PM	
Client ID:		Run ID: VMS8_141013B				SeqNo:2980323		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.84	1.0	20	0	114	85-125	0				
Ethylbenzene	21.95	1.0	20	0	110	85-125	0				
m,p-Xylene	43.27	2.0	40	0	108	75-130	0				
o-Xylene	22.06	1.0	20	0	110	80-125	0				
Toluene	22.14	1.0	20	0	111	85-125	0				
Xylenes, Total	65.33	3.0	60	0	109	80-126	0				
Surr: 1,2-Dichloroethane-d4	19.72	0	20	0	98.6	75-120	0				
Surr: 4-Bromofluorobenzene	19.88	0	20	0	99.4	80-110	0				
Surr: Dibromofluoromethane	19.87	0	20	0	99.4	85-115	0				
Surr: Toluene-d8	19.33	0	20	0	96.6	85-110	0				

MS				Sample ID: 1410567-06A MS			Units: µg/L		Analysis Date: 10/14/2014 09:32 AM		
Client ID: MW-6			Run ID: VMS8_141013B			SeqNo:2980381		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.66	1.0	20	0.37	111	85-125	0				
Ethylbenzene	20.65	1.0	20	0	103	85-125	0				
m,p-Xylene	41.27	2.0	40	0	103	75-130	0				
o-Xylene	20.64	1.0	20	0	103	80-125	0				
Toluene	21.39	1.0	20	0	107	85-125	0				
Xylenes, Total	61.91	3.0	60	0	103	80-126	0				
Surr: 1,2-Dichloroethane-d4	18.2	0	20	0	91	75-120	0				
Surr: 4-Bromofluorobenzene	20.5	0	20	0	102	80-110	0				
Surr: Dibromofluoromethane	19.28	0	20	0	96.4	85-115	0				
Surr: Toluene-d8	20.11	0	20	0	101	85-110	0				

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150188A**      Instrument ID **VMS8**      Method: **SW8260**

MSD				Sample ID: 1410567-06A MSD				Units: µg/L		Analysis Date: 10/14/2014 09:57 AM	
Client ID: MW-6			Run ID: VMS8_141013B			SeqNo: 2980387		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.91	1.0	20	0.37	118	85-125	22.66	5.37	30		
Ethylbenzene	20.81	1.0	20	0	104	85-125	20.65	0.772	30		
m,p-Xylene	41.19	2.0	40	0	103	75-130	41.27	0.194	30		
o-Xylene	20.75	1.0	20	0	104	80-125	20.64	0.532	30		
Toluene	21.8	1.0	20	0	109	85-125	21.39	1.9	30		
Xylenes, Total	61.94	3.0	60	0	103	80-126	61.91	0.0484	30		
Surr: 1,2-Dichloroethane-d4	19.72	0	20	0	98.6	75-120	18.2	8.02	30		
Surr: 4-Bromofluorobenzene	20.8	0	20	0	104	80-110	20.5	1.45	30		
Surr: Dibromofluoromethane	20.41	0	20	0	102	85-115	19.28	5.69	30		
Surr: Toluene-d8	20.38	0	20	0	102	85-110	20.11	1.33	30		

The following samples were analyzed in this batch:

1410567-01A	1410567-02A	1410567-03A
1410567-04A	1410567-05A	1410567-06A
1410567-07A	1410567-08A	1410567-09A
1410567-10A		

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1410567  
 Project: WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150268A** Instrument ID **VMS9** Method: **SW8260**

MBLK				Sample ID: VBLKW1-141014-R150268A				Units: µg/L		Analysis Date: 10/14/2014 09:42 PM	
Client ID:			Run ID: VMS9_141014A			SeqNo: 2981567		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
m,p-Xylene	ND	2.0									
Xylenes, Total	ND	3.0									
Surr: 1,2-Dichloroethane-d4	20.72	0	20	0	104	75-120	0				
Surr: 4-Bromofluorobenzene	18.18	0	20	0	90.9	80-110	0				
Surr: Dibromofluoromethane	20.09	0	20	0	100	85-115	0				
Surr: Toluene-d8	19.03	0	20	0	95.2	85-110	0				

LCS				Sample ID: <b>VLCSW2-141014-R150268A</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/14/2014 08:29 PM</b>	
Client ID:			Run ID: <b>VMS9_141014A</b>			SeqNo: <b>2981566</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	
m,p-Xylene	41.61	2.0	40	0	104	75-130	0				
Xylenes, Total	61.99	3.0	60	0	103	80-126	0				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.27</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>21.11</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>106</i>	<i>80-110</i>	<i>0</i>				
<i>Surr: Dibromofluoromethane</i>	<i>20.09</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>85-115</i>	<i>0</i>				
<i>Surr: Toluene-d8</i>	<i>19.64</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>85-110</i>	<i>0</i>				

MS					Sample ID: 1410502-01A MS			Units: µg/L		Analysis Date: 10/15/2014 06:19 AM	
Client ID:			Run ID: VMS9_141014A			SeqNo:2981571		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
m,p-Xylene	38.86	2.0	40	0	97.2	75-130	0				
Xylenes, Total	57.65	3.0	60	0	96.1	80-126	0				
Surr: 1,2-Dichloroethane-d4	20.57	0	20	0	103	75-120	0				
Surr: 4-Bromofluorobenzene	20.91	0	20	0	105	80-110	0				
Surr: Dibromofluoromethane	20.31	0	20	0	102	85-115	0				
Surr: Toluene-d8	19.62	0	20	0	98.1	85-110	0				

MSD				Sample ID: 1410502-01A MSD				Units: µg/L		Analysis Date: 10/15/2014 06:44 AM	
Client ID:			Run ID: VMS9_141014A			SeqNo:2981572		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
m,p-Xylene	38.26	2.0	40	0	95.6	75-130	38.86	1.56	30		
Xylenes, Total	56.93	3.0	60	0	94.9	80-126	57.65	1.26	30		
Surr: 1,2-Dichloroethane-d4	20.49	0	20	0	102	75-120	20.57	0.39	30		
Surr: 4-Bromofluorobenzene	20.86	0	20	0	104	80-110	20.91	0.239	30		
Surr: Dibromofluoromethane	20.4	0	20	0	102	85-115	20.31	0.442	30		
Surr: Toluene-d8	19.94	0	20	0	99.7	85-110	19.62	1.62	30		

The following samples were analyzed in this batch:

1410567-01A 1410567-09A

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



Client: HRL Compliance Solutions, Inc  
 Work Order: 1410567  
 Project: WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150397** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: <b>VBLKW1-141016-R150397</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2014 11:59 AM</b>		
Client ID:		Run ID: <b>VMS9_141016A</b>				SeqNo: <b>2984419</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	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	20.93	0	20	0	105	75-120	0			
Surr: 4-Bromofluorobenzene	17.98	0	20	0	89.9	80-110	0			
Surr: Dibromofluoromethane	20.56	0	20	0	103	85-115	0			
Surr: Toluene-d8	19.2	0	20	0	96	85-110	0			

LCS		Sample ID: <b>VLCSW1-141016-R150397</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2014 10:45 AM</b>		
Client ID:		Run ID: <b>VMS9_141016A</b>				SeqNo: <b>2984417</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	22.12	1.0	20	0	111	85-125	0			
Ethylbenzene	19.74	1.0	20	0	98.7	85-125	0			
m,p-Xylene	40.02	2.0	40	0	100	75-130	0			
o-Xylene	19.41	1.0	20	0	97	80-125	0			
Toluene	19.56	1.0	20	0	97.8	85-125	0			
Xylenes, Total	59.43	3.0	60	0	99	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.75	0	20	0	98.8	75-120	0			
Surr: 4-Bromofluorobenzene	21.12	0	20	0	106	80-110	0			
Surr: Dibromofluoromethane	20.23	0	20	0	101	85-115	0			
Surr: Toluene-d8	19.39	0	20	0	97	85-110	0			

MS		Sample ID: <b>1410732-03A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>10/16/2014 08:36 PM</b>		
Client ID:		Run ID: <b>VMS9_141016A</b>				SeqNo: <b>2985778</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	22.39	1.0	20	0	112	85-125	0			
Ethylbenzene	19.39	1.0	20	0	97	85-125	0			
m,p-Xylene	38.7	2.0	40	0	96.8	75-130	0			
o-Xylene	18.94	1.0	20	0	94.7	80-125	0			
Toluene	19.68	1.0	20	0	98.4	85-125	0			
Xylenes, Total	57.64	3.0	60	0	96.1	80-126	0			
Surr: 1,2-Dichloroethane-d4	20.82	0	20	0	104	75-120	0			
Surr: 4-Bromofluorobenzene	20.46	0	20	0	102	80-110	0			
Surr: Dibromofluoromethane	20.73	0	20	0	104	85-115	0			
Surr: Toluene-d8	19.85	0	20	0	99.2	85-110	0			

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150397**      Instrument ID **VMS9**      Method: **SW8260**

MSD				Sample ID: 1410732-03A MSD				Units: µg/L		Analysis Date: 10/16/2014 09:01 PM	
Client ID:			Run ID: VMS9_141016A			SeqNo: 2985779		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.63	1.0	20	0	113	85-125	22.39	1.07	30		
Ethylbenzene	19.24	1.0	20	0	96.2	85-125	19.39	0.777	30		
m,p-Xylene	38.41	2.0	40	0	96	75-130	38.7	0.752	30		
o-Xylene	18.78	1.0	20	0	93.9	80-125	18.94	0.848	30		
Toluene	19.58	1.0	20	0	97.9	85-125	19.68	0.509	30		
Xylenes, Total	57.19	3.0	60	0	95.3	80-126	57.64	0.784	30		
Surr: 1,2-Dichloroethane-d4	20.39	0	20	0	102	75-120	20.82	2.09	30		
Surr: 4-Bromofluorobenzene	20.36	0	20	0	102	80-110	20.46	0.49	30		
Surr: Dibromofluoromethane	20.62	0	20	0	103	85-115	20.73	0.532	30		
Surr: Toluene-d8	19.77	0	20	0	98.8	85-110	19.85	0.404	30		

The following samples were analyzed in this batch: 1410567-02A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150183**      Instrument ID **LACHAT2**      Method: **E353.2 R2.0**

<b>MBLK</b>		Sample ID: <b>MBLK-R150183</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/13/2014 02:46 PM</b>		
Client ID:		Run ID: <b>LACHAT2_141013B</b>				SeqNo: <b>2979481</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

Nitrogen, Nitrate-Nitrite      ND      0.020

<b>LCS</b>		Sample ID: <b>LCS-R150183</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/13/2014 02:46 PM</b>		
Client ID:		Run ID: <b>LACHAT2_141013B</b>				SeqNo: <b>2979482</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

Nitrogen, Nitrate-Nitrite      5.037      0.020      5      0      101      80-120      0

<b>MS</b>		Sample ID: <b>1410459-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/13/2014 02:46 PM</b>		
Client ID:		Run ID: <b>LACHAT2_141013B</b>				SeqNo: <b>2979485</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

Nitrogen, Nitrate-Nitrite      4.976      0.020      5      0.248      94.6      75-125      0

<b>MS</b>		Sample ID: <b>1410622-03F MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/13/2014 02:46 PM</b>		
Client ID:		Run ID: <b>LACHAT2_141013B</b>				SeqNo: <b>2979503</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

Nitrogen, Nitrate-Nitrite      5.256      0.020      5      0.5959      93.2      75-125      0

<b>MSD</b>		Sample ID: <b>1410459-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/13/2014 02:46 PM</b>		
Client ID:		Run ID: <b>LACHAT2_141013B</b>				SeqNo: <b>2979486</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

Nitrogen, Nitrate-Nitrite      4.984      0.020      5      0.248      94.7      75-125      4.976      0.161      20

<b>MSD</b>		Sample ID: <b>1410622-03F MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/13/2014 02:46 PM</b>		
Client ID:		Run ID: <b>LACHAT2_141013B</b>				SeqNo: <b>2979504</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

Nitrogen, Nitrate-Nitrite      5.276      0.020      5      0.5959      93.6      75-125      5.256      0.38      20

The following samples were analyzed in this batch:

1410567-01D	1410567-02D	1410567-03D
1410567-04D	1410567-05D	1410567-06D
1410567-07D	1410567-08D	1410567-09D

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150203**      Instrument ID **Titration 1**      Method: **A4500-F C**

<b>MBLK</b>		Sample ID: <b>WBLKW1-101414-R150203</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/14/2014 09:30 AM</b>		
Client ID:		Run ID: <b>TITRATOR 1_141014A</b>				SeqNo: <b>2980026</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
Fluoride	0.029	0.10								J

<b>LCS</b>		Sample ID: <b>WLCSW1-101414-R150203</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/14/2014 09:30 AM</b>		
Client ID:		Run ID: <b>TITRATOR 1_141014A</b>				SeqNo: <b>2980027</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
Fluoride	4.882	0.10	5	0	97.6	80-120	0			

<b>MS</b>		Sample ID: <b>1410513-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/14/2014 09:30 AM</b>		
Client ID:		Run ID: <b>TITRATOR 1_141014A</b>				SeqNo: <b>2980031</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
Fluoride	5.121	0.10	5	0.238	97.7	75-125	0			

<b>MSD</b>		Sample ID: <b>1410513-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/14/2014 09:30 AM</b>		
Client ID:		Run ID: <b>TITRATOR 1_141014A</b>				SeqNo: <b>2980032</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
Fluoride	5.024	0.10	5	0.238	95.7	75-125	5.121	1.91	20	

The following samples were analyzed in this batch:

1410567-01C	1410567-02C	1410567-03C
1410567-04C	1410567-05C	1410567-06C
1410567-07C	1410567-08C	1410567-09C

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150378**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>MBLK-R150378</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/15/2014 07:16 AM</b>		
Client ID:		Run ID: <b>IC3_141014C</b>				SeqNo: <b>2983378</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	0.4347	1.0								J
Sulfate	ND	1.0								

<b>LCS</b>		Sample ID: <b>LCS-R150378</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/15/2014 07:36 AM</b>		
Client ID:		Run ID: <b>IC3_141014C</b>				SeqNo: <b>2983379</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	2.1	0.20	2	0	105	88-113	0			
Chloride	9.562	1.0	10	0	95.6	88-107	0			
Sulfate	9.286	1.0	10	0	92.9	85-110	0			

<b>MS</b>		Sample ID: <b>1410567-01C MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/15/2014 10:18 AM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>IC3_141014C</b>				SeqNo: <b>2983387</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	2.25	1.0	2	0.5775	83.6	75-125	0			
Chloride	59.42	5.0	10	61.11	-16.9	75-125	0			SO

<b>MS</b>		Sample ID: <b>1410567-01C MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/15/2014 11:19 AM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>IC3_141014C</b>				SeqNo: <b>2983391</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
Sulfate	112.9	20	10	113.4	-5	75-125	0			SO

<b>MSD</b>		Sample ID: <b>1410567-01C MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/15/2014 10:38 AM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>IC3_141014C</b>				SeqNo: <b>2983388</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	2.168	1.0	2	0.5775	79.5	75-125	2.25	3.74	20	
Chloride	59.08	5.0	10	61.11	-20.3	75-125	59.42	0.576	20	SO

<b>MSD</b>		Sample ID: <b>1410567-01C MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/15/2014 11:39 AM</b>		
Client ID: <b>MW-1</b>		Run ID: <b>IC3_141014C</b>				SeqNo: <b>2983392</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
Sulfate	113.4	20	10	113.4	0.14	75-125	112.9	0.454	20	SO

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

**QC BATCH REPORT**

Batch ID: **R150378**      Instrument ID **IC3**      Method: **SW9056**

The following samples were analyzed in this batch:	1410567-01C	1410567-02C	1410567-03C
	1410567-04C	1410567-05C	1410567-06C
	1410567-07C	1410567-08C	1410567-09C

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410567  
**Project:** WPX TR 31-5-697 Quarterly MW 10.8.14

## QC BATCH REPORT

Batch ID: **R150639**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R150639</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2014 07:48 PM</b>		
Client ID:		Run ID: <b>IC3_141019A</b>				SeqNo: <b>2989277</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

<b>LCS</b>		Sample ID: <b>LCS-R150639</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/19/2014 08:08 PM</b>		
Client ID:		Run ID: <b>IC3_141019A</b>				SeqNo: <b>2989278</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      2.098      0.20      2      0      105      88-113      0

<b>MS</b>		Sample ID: <b>1410741-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/20/2014 12:46 AM</b>		
Client ID:		Run ID: <b>IC3_141019A</b>				SeqNo: <b>2989291</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      27.34      4.0      20      5.062      111      75-125      0

<b>MSD</b>		Sample ID: <b>1410741-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>10/20/2014 01:06 AM</b>		
Client ID:		Run ID: <b>IC3_141019A</b>				SeqNo: <b>2989292</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      27.21      4.0      20      5.062      111      75-125      27.34      0.455      20

The following samples were analyzed in this batch:

1410567-02C	1410567-03C	1410567-04C
1410567-05C	1410567-06C	1410567-07C
1410567-08C		

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



# ALS Environmental

3352 128<sup>th</sup> Avenue Holland, MI 49424  
PH: (616) 309-0070

## Chain-of-Custody


Form 202r6


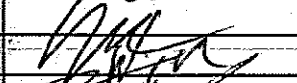
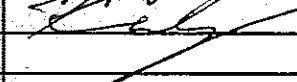
WORKORDER #	1410507
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PROJECTNAME WPX TR 31-5-697 Qtr. MW		SAMPLER Mike Lobato		DATE 10/8/14		PAGE 1 of 1	
PROJECT No.		SITEID TR 31-5-697		TURNAROUND Std. 5 Day		DISPOSAL By Lab or Return to Client	
COMPANYNAME HRL Compliance Solutions, Inc.		BILL TO COMPANY WPX		BTEX		GRO	
SEND REPORT TO Mark Mumby		INVOICE ATTN TO Karolina Blaney		DRO		PAHs	
ADDRESS 2385 F 1/2 Road		ADDRESS 1058 Co Rd 215		DISSOLVED METALS		CATIONS	
CITY / STATE / ZIP Grand Junction, CO 81505		CITY / STATE / ZIP Parachute, CO 81635		ANIONS			
PHONE 970-243-3271		PHONE 970-683-2295					
FAX 970-243-3280		FAX					
E-MAIL mmumby@hrlcomp.com		E-MAIL Karolina.blaney@wpenergy.com					
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC
1	MW 1	W	10/8/14	1123	7	1.8	
2	MW 2	W	10/8/14	1430	7	1.8	
3	MW 3	W	10/8/14	1255	7	1.8	
4	MW 4	W	10/8/14	1230	7	1.8	
5	MW 5	W	10/8/14	1310	7	1.8	
6	MW 6	W	10/8/14	1150	7	1.8	
7	MW 7	W	10/8/14	1210	7	1.8	
8	MW 8	W	10/8/14	1335	7	1.8	
9	MW 9	W	10/8/14	1350	7	1.8	
10	TRIP BLANK	W	10/8/14	—	1	1.8	

\*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)
 3.9"	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
	Mike Lobato	10/8/14	1700
	Karolina Blaney	10-8-14	1700
	Keith W. Green	8/9/14	0930



Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **09-Oct-14 09:30**

Work Order: **1410567**

Received by: **KRW**

Checklist completed by	<u>Paul De Weese</u>	09-Oct-14	Reviewed by:	<u>Ann Preston</u>	09-Oct-14
	eSignature	Date		eSignature	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>3.8 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>10/9/2014 3:30:06 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:			

Login Notes:

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Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: