

PROJECT NO: 010-1708

DRAWN BY: FR

DATE: 8/19/10

Site Map
OXY Laramie Land and Cattle 17-5
SW1/4 NW1/4 Section 17 T10S R94W
Mesa County, Colorado

OLSSON
ASSOCIATES

4690 Table Mountain Drive
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Golden, CO 80403
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FIGURE

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WATER ATTACHMENTS

Table 1
LLC OXY Remediation
OXY USA INC.

COLORADO #1 WELL AND SEEP SAMPLING				Organics										General Chemistry					Anions					Metals										Alkalinity Series			
				ANALYSIS	Dissolved Oxygen (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	TDS (mg/L)	EC (µmhos/cm)	pH (su)	Cl (mg/L)	NO3 (mg/L)	o-Phosphate (mg/L)	SO4 (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)	Mo (mg/L)	Ni (mg/L)	Zn (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Hydroxide (mg/L)	Total Alkalinity (mg/L)		
ALLOWABLE LIMIT*	NA	0.005	.560 - 1.000	0.700	1.400 - 10.000	BDL	NA	NA	NA	<1.25 x background	NA	NA	<1.25 x background	NA	NA	<1.25 x background	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
LOCATION	SAMPLE ID	SAMPLED BY	SAMPLE DATE	DEPTH TO WATER (FEET)																																	
Irrigation Ditch (Grove Crk Background)	Irrigation	Oxy	7/12/2010	NA	*	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	NT	NT	NT	150	0.220	8.3	1	<0.041	0.037	5.4	<0.0065	0.053	0.0008	26	0.002	0.43	0.0018	0.0018	0.0025	<0.0053	<0.0068	<1.1	110	<1.1	110		
Upstream	Upstream	Oxy	7/12/2010	NA	*	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	NT	NT	NT	260	0.400	7.3	3	0.43	0.03	5.3	<0.0065	0.12	<0.0080	50	<0.0017	0.044	0.0034	13	0.0047	<0.0053	<0.0068	<1.1	210	<1.1	210		
Seep 1	S1	Oxy	7/15/2010	NA	*	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	NT	NT	NT	260	0.400	7.10	2.8	1.1	0.54	5.6	<0.0065	0.2	<0.0080	56	0.002	1.4	0.028	14.0000	0.007	<0.0053	0.011	<1.1	220	<1.1	220		
	S1	Olsson	2/23/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
	S1	Olsson	3/21/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
	S1	Olsson	4/18/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	S1	Olsson	5/16/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	S1	Olsson	6/22/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S1	Olsson	7/16/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S1	Olsson	4/17/2012	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S1	Olsson	5/23/2012	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Seep 2	S2	Olsson	11/15/2010	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S2	Olsson	2/23/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Seep 3	S3	Oxy	7/15/2010	NA	*	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	<0.0020	<0.0040	<0.0057	260	0.43	7.30	3.2	<0.041	1.4	5.8	0.040	1.2	<0.0080	110	0.01	79	0.057	21.0	<0.0017	0.19	0.08	<1.1	230	<1.1	230		
	S3	Olsson	1/18/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S3	Olsson	3/21/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S3	Olsson	4/18/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S3	Olsson	5/16/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S3	Olsson	6/22/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S3	Olsson	7/16/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S3	Olsson	8/16/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	S3	Olsson	9/19/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	S3	Olsson	10/17/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	S3	Olsson	11/28/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	S3	Olsson	12/19/2011	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	S3	Olsson	1/17/2012	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	S3	Olsson	2/21/2012	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	S3	Olsson	3/19/2012	NA	*	<0.00050	<0.00050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT						

Table 1
LLC 17-5 Remediation
OXY USA INC.

COLORADO #1 WELL AND SEEP SAMPLING				Organics																			General Chemistry				Anions				Metals												Alkalinity Series				Total Alkalinity (mg/L)
ANALYSIS				Dissolved Oxygen (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	TDS (mg/L)	EC (µmhos/cm)	pH (su)	Cl (mg/L)	NO3 (mg/L)	o-Phosphate (mg/L)	SO4 (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)	Mo (mg/L)	Ni (mg/L)	Zn (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Hydroxide (mg/L)														
ALLOWABLE LIMIT*				NA	0.005	.560 - 1.000	0.700	1.400 - 10.000	BDL	NA	NA	NA	<1.25 x background	NA	NA	<1.25 x background	NA	NA	<1.25 x background	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA													
LOCATION	SAMPLE ID	SAMPLED BY	SAMPLE DATE	DEPTH TO WATER (FEET)																																											
Seep 12	S11	Olsson	10/17/2011	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT														
	S11	Olsson	11/28/2011	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT														
	S11	Olsson	12/19/2011	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT														
	S11	Olsson	1/17/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT														
	S11	Olsson	2/21/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT														
	S11	Olsson	3/19/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT													
	S11	Olsson	4/17/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT													
	S11	Olsson	5/23/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT													
	S11	Olsson	6/19/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT												
	S11	Olsson	7/18/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT												
	S11	Olsson	8/20/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT											
Seep 12	S12	Olsson	3/19/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT													
	S12	Olsson	4/17/2012	NA	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT													
	S12	Olsson	5/23/2012	NA	*	<0.00050	<0.0050																																								

Table 1
LLC 17-5 Remediation
OXY USA INC.

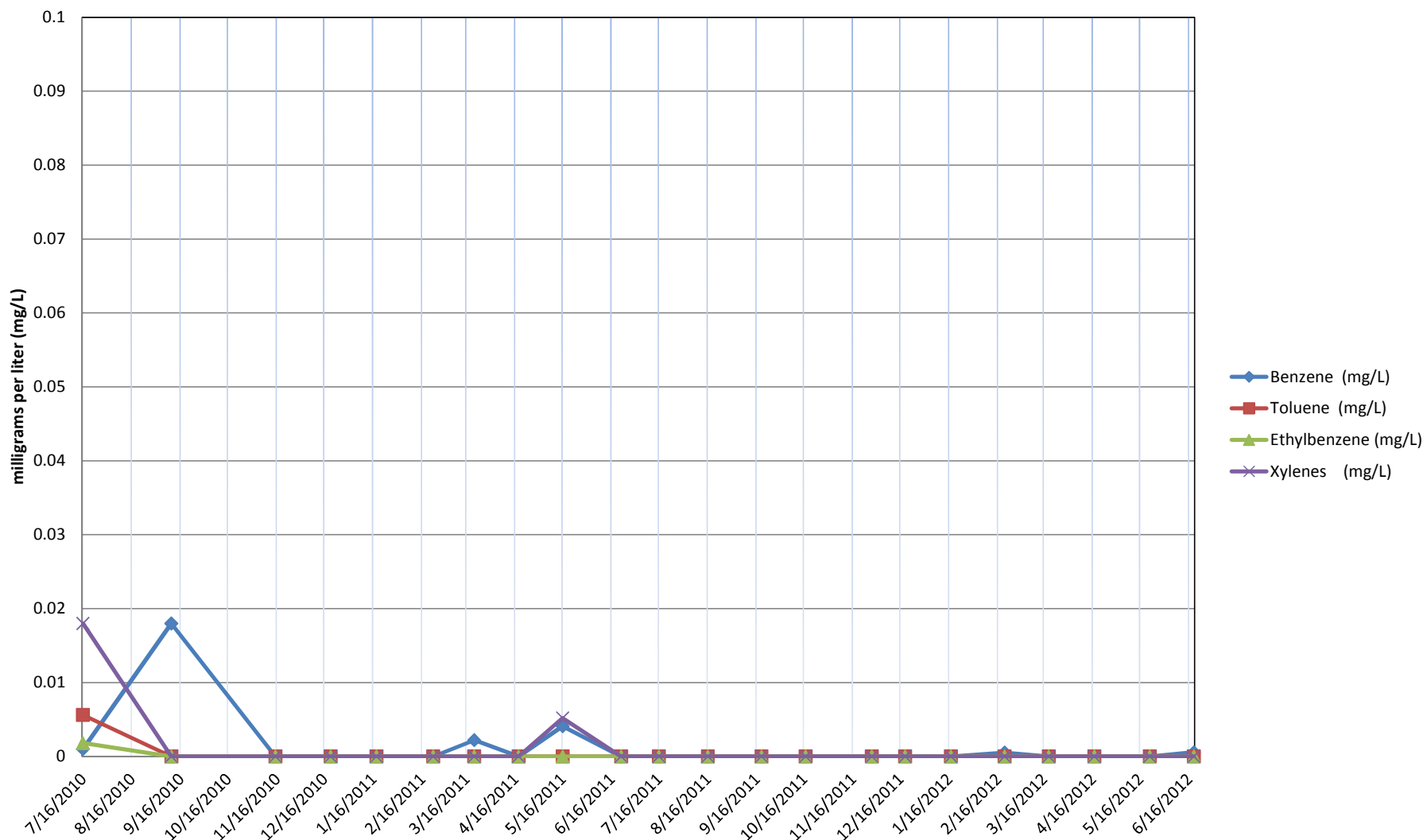
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Table 1
LLC 17-5 Remediation
OXY USA INC.

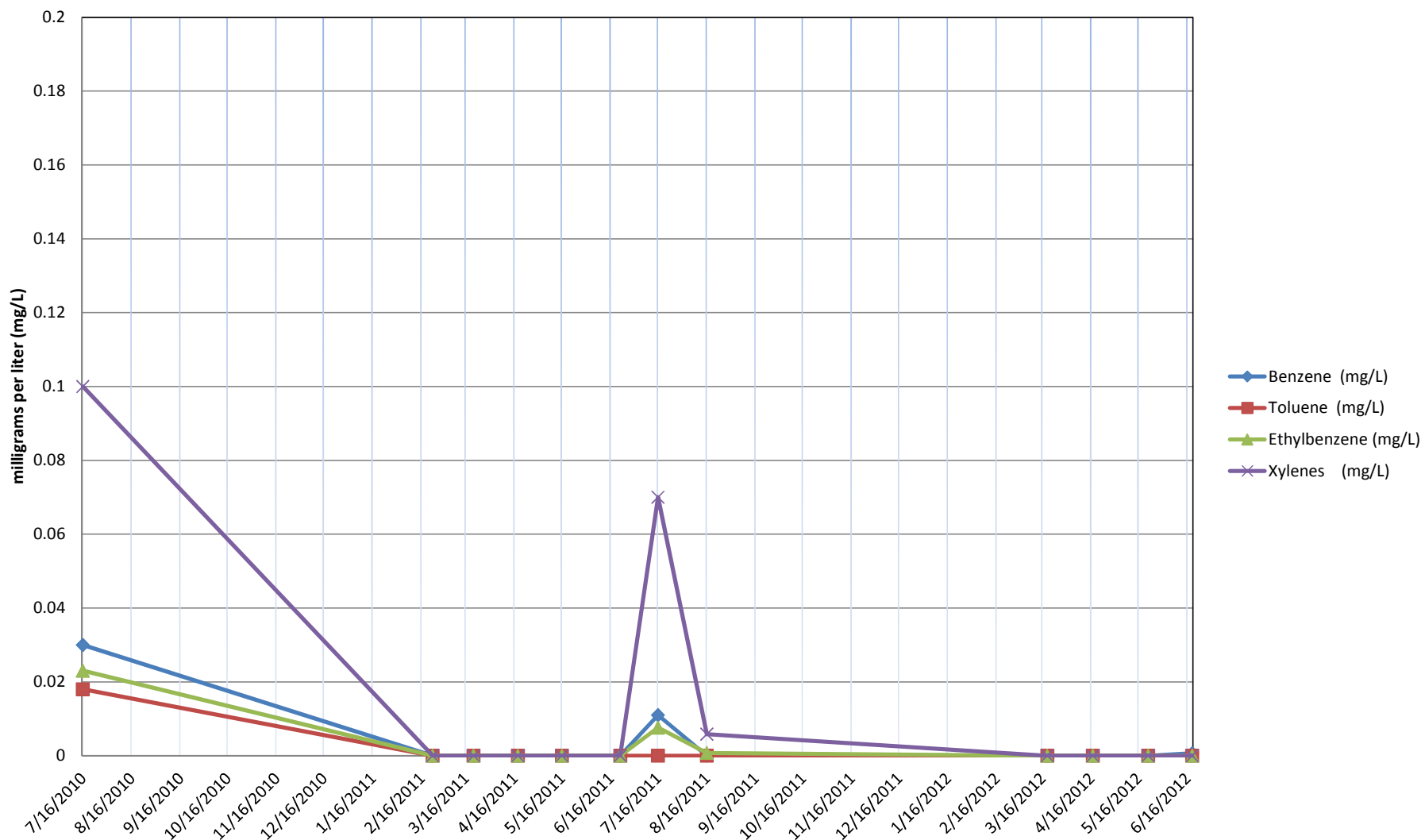
COLORADO #1 WELL AND SEEP SAMPLING					Organics										General Chemistry				Anions				Metals										Alkalinity Series						
ANALYSIS					Dissolved Oxygen (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	TDS (mg/L)	EC (µmhos/cm)	pH (su)	Cl (mg/L)	NO3 (mg/L)	o-Phosphate (mg/L)	SO4 (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)	Mo (mg/L)	Ni (mg/L)	Zn (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Hydroxide (mg/L)	Total Alkalinity (mg/L)				
ALLOWABLE LIMIT*					NA	0.005	.560 - 1.009	0.700	1,400 - 10,000	BDL	NA	NA	NA	<1.25 x background	NA	NA	<1.25 x background	NA	NA	<1.25 x background	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
LOCATION	SAMPLE ID	SAMPLED BY	SAMPLE DATE	DEPTH TO WATER (FEET)																																			
Trench/Well 9	P8	Olsson	10/17/2011	14.21	0.12	0.0058	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT					
	P8	Olsson	11/28/2011	14.13	2.18	0.0092	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT					
	P8	Olsson	12/19/2011	14.29	3.14	0.0067	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT				
	P8	Olsson	1/17/2012	14.63	4.38	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT				
	P8	Olsson	2/21/2012	14.95	6.59	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT				
	P8	Olsson	3/19/2012	14.67	4.93	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
	P8	Olsson	4/17/2012	14.37	1.76	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
	P8	Olsson	5/22/2012	13.60	0.24	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	P8	Olsson	6/19/2012	11.91	0.48	0.0030	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	P8	Olsson	7/18/2012	14.78	0.13	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
	Trench/Well 9	T9	Olsson	7/29/2010	*	*	0.064	<0.0050	0.00088	0.19	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		T9	Olsson	9/10/2010	10.70	*	0.0050	<0.0050	0.00083	0.0063	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		PIT 9	Olsson	11/15/2010	9.16	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
		PIT 9	Olsson	12/20/2010	8.70	*	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
		P9	Olsson	1/18/2011	8.41	*	0.0031	<0.0050	<0.00050	0.0022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		P9	Olsson	2/23/2011	8.07	0.02	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		P9	Olsson	3/21/2011	7.69	19.18	0.0012	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		P9	Olsson	4/18/2011	7.39	30.13	0.0078	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		P9	Olsson	5/16/2011	6.78	32.33	0.0081	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		P9	Olsson	6/22/2011	5.10	28.40	0.19	<0.0050	0.018	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
P9		Olsson	7/18/2011	6.39	24.43	0.27	<0.0050	0.045	0.0097	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	8/16/2011	6.85	11.03	0.0390	<0.0050	0.020	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	9/19/2011	8.20	0.68	0.0011	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	10/17/2011	8.04	0.31	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	11/28/2011	8.17	14.04	0.034	<0.0050	0.012	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	12/19/2011	8.33	14.66	0.017	<0.0050	0.0095	0.086	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	1/17/2012	8.70	0.16	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	2/21/2012	8.84	14.50	0.0012	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	3/19/2012	8.16	20.74	0.0064	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9		Olsson	4/17/2012	8.16	25.40	0.0074	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
P9	Olsson	5/22/2012	7.39	26.22	0.072	<0.0050	0.017	0.45	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
P9	Olsson	6/19/2012	7.65	24.68	0.037	<0.0050	0.0036	0.16	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
P9	Olsson	7/18/2012	10.69	12.82	0.0044	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
P9	Olsson	8/20/2012	12.42	14.39	0.0014	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
P9	Olsson	11/19/2012	12.71	4.31	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
P9	Olsson	12/30/2012	11.98	4.79	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
P9	Olsson	1/10/2013	10.91	2.32	<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
P9	Olsson	3/7/2013			<0.00050	<0.0050	<0.00050	<0.0015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
Trench/Well 10	T10	Olsson	7/29/2010	*	*	0.019	<0.0050	0.0035	0.26	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	T10	Olsson	9/10/2010	11.13	*	0.041	<0.0050	0.0043	0.0022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	PIT 10	Olsson	11/15/2010	9.72	*	0.034	<0.0050	0.0047	0.43	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	PIT 10	Olsson	12/20/2010	8.70	*	0.011	<0.0050	0.00052	0.12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	PIT 10	Olsson	1/18/2011	8.15	*	0.0097	<0.0050	<0.00050	0.060	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		
	P10	Olsson	2/23/2011	7.61	0.09	0.0038	<0.0050	<0.00050	0.049	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT							

* Taken from COGCC Table 910-1
 ° Data Not Collected
 <### - Not detected
 NT - Analysis not requested

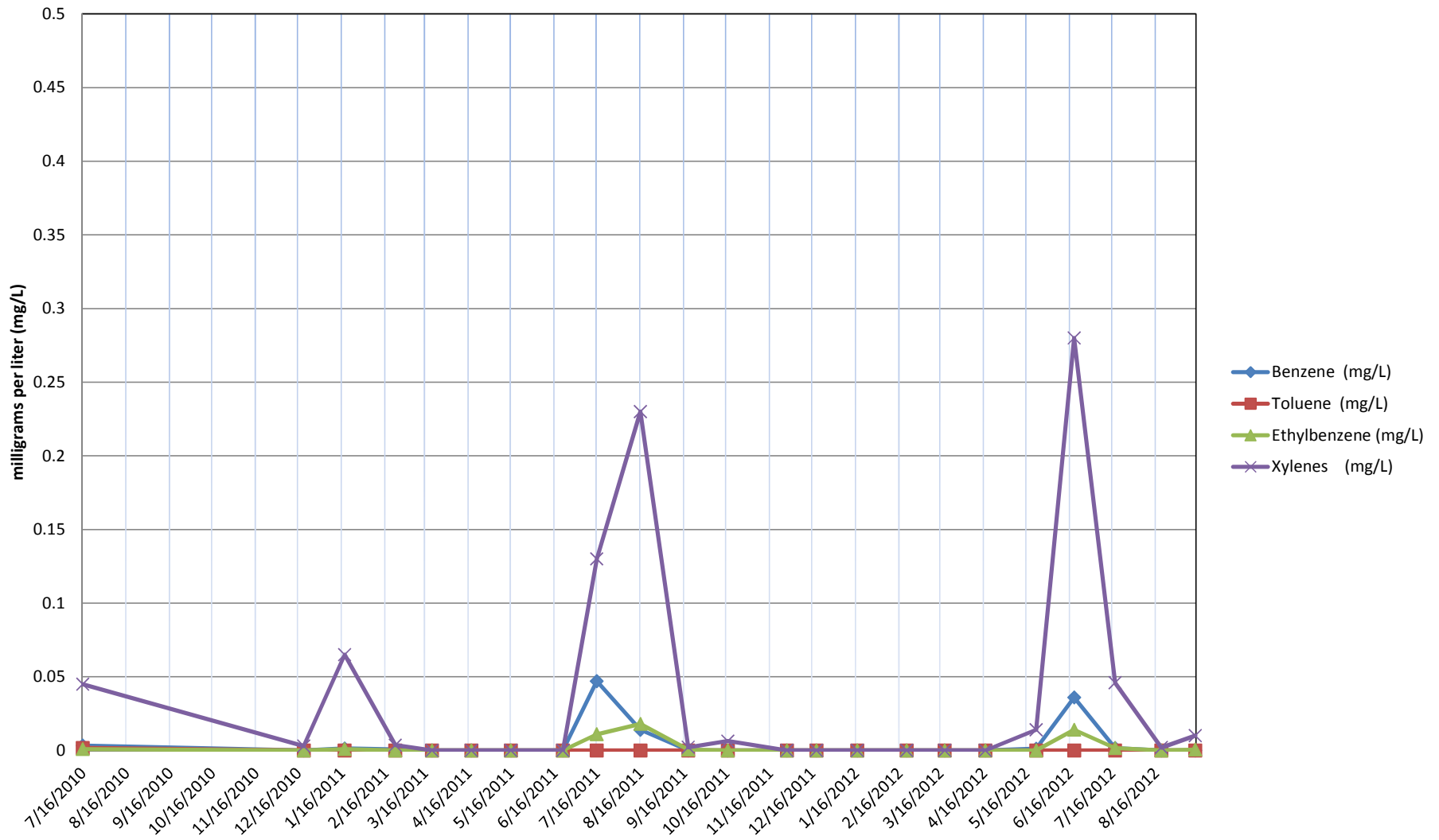
Trench/Well 1 BTEX Concentrations Over Time



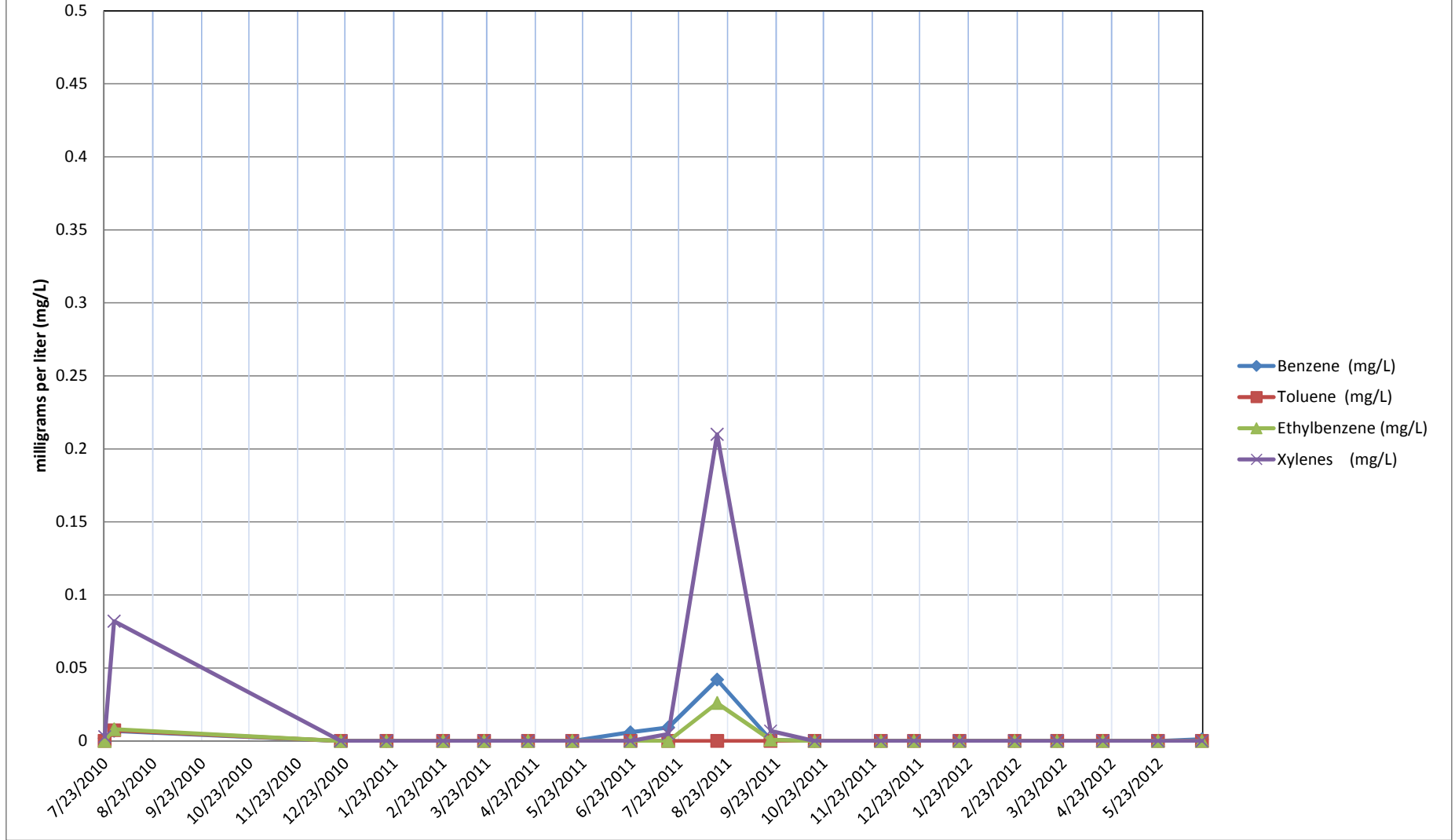
Trench/Well 2 BTEX Concentrations Over Time



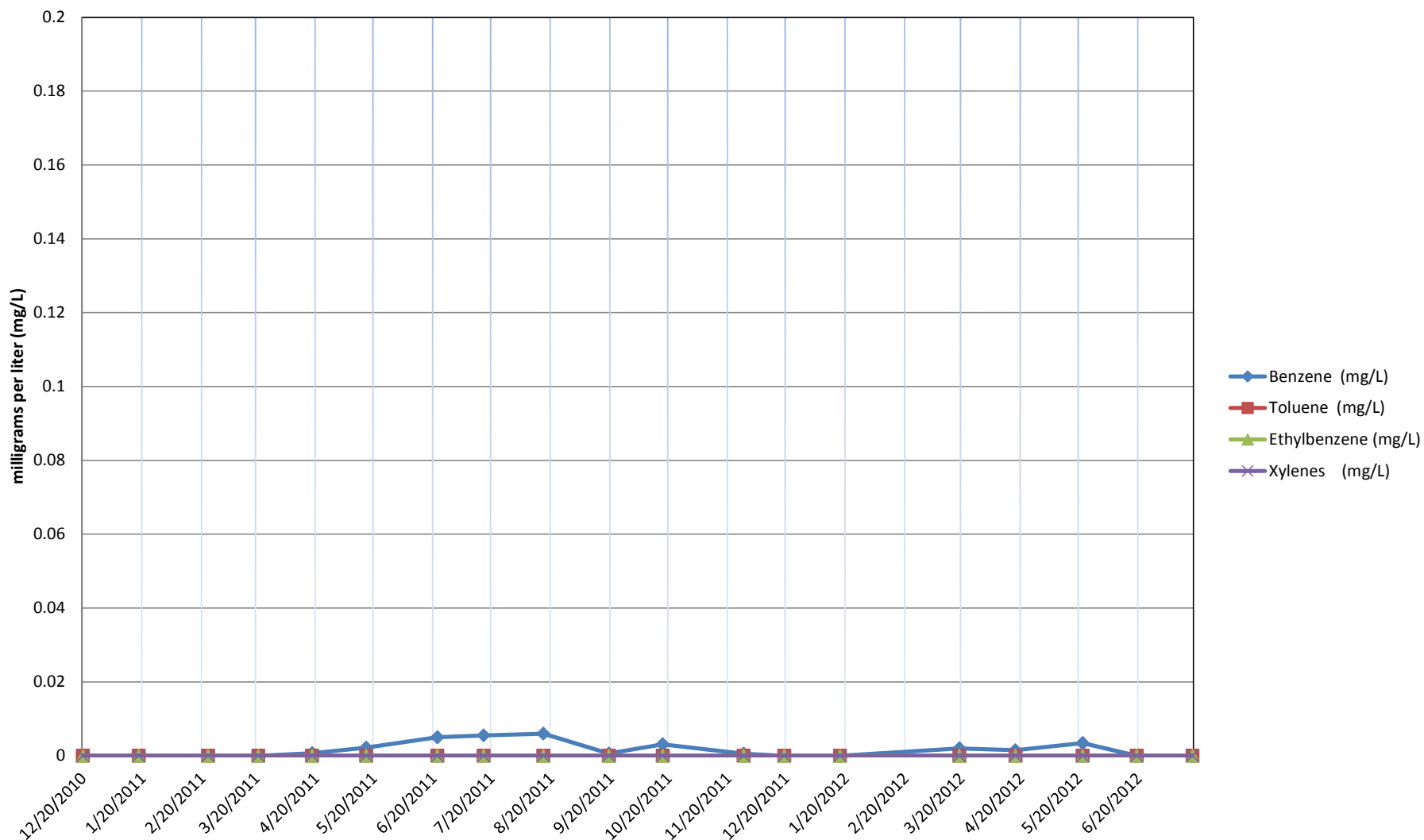
Trench/Well 4 BTEX Concentrations Over Time



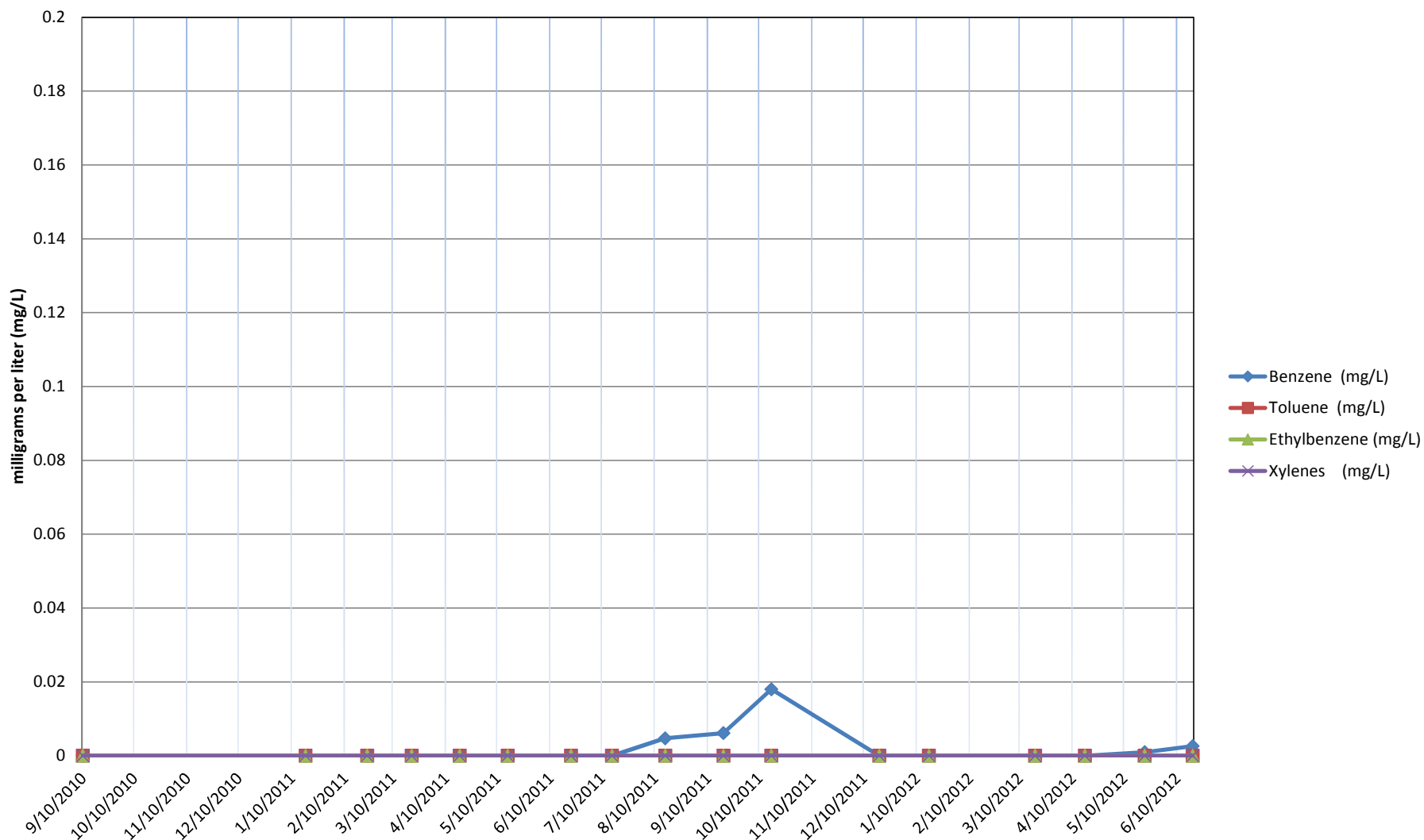
Trench/Well 5 BTEX Concentrations Over Time



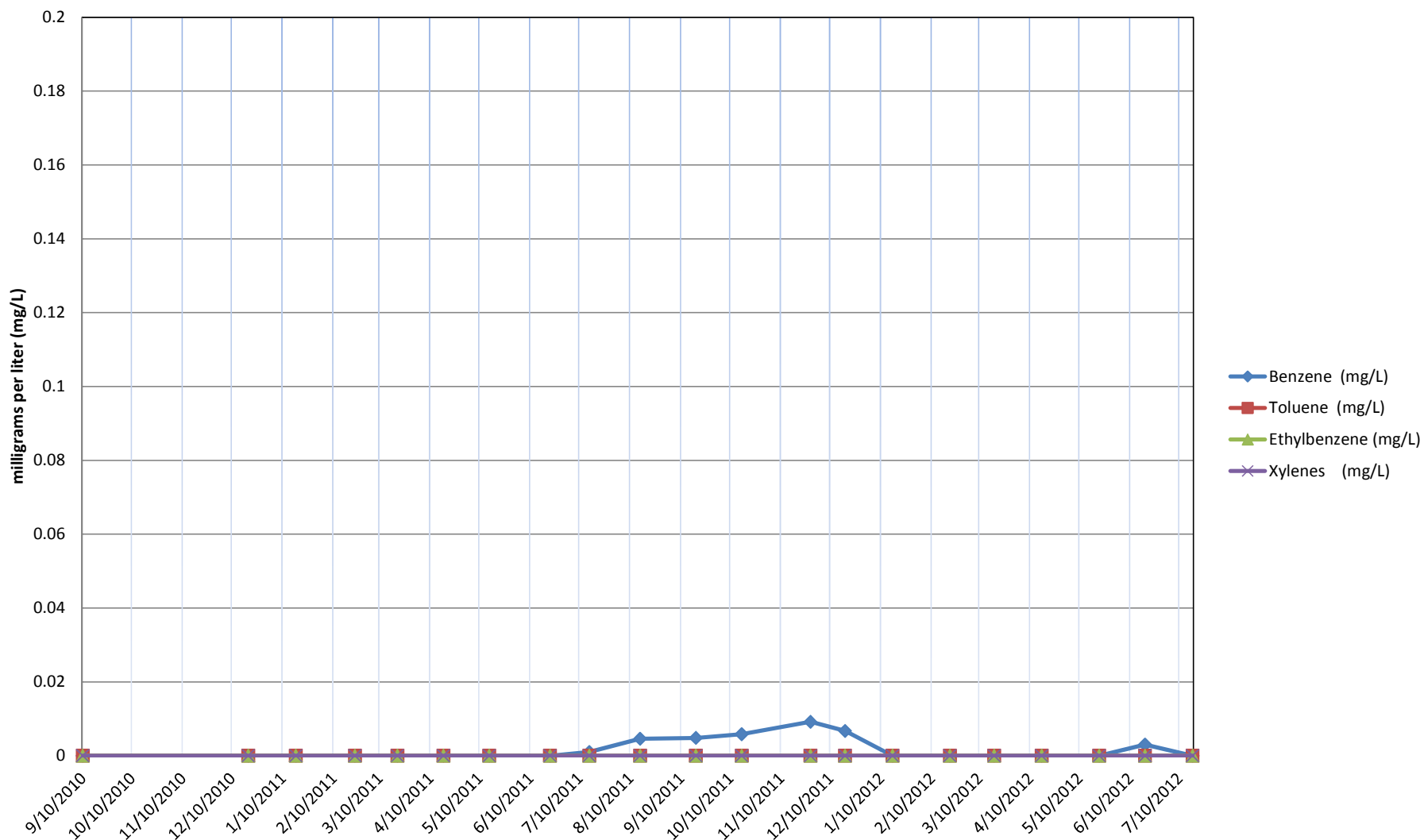
Trench/Well 6 BTEX Concentrations Over Time



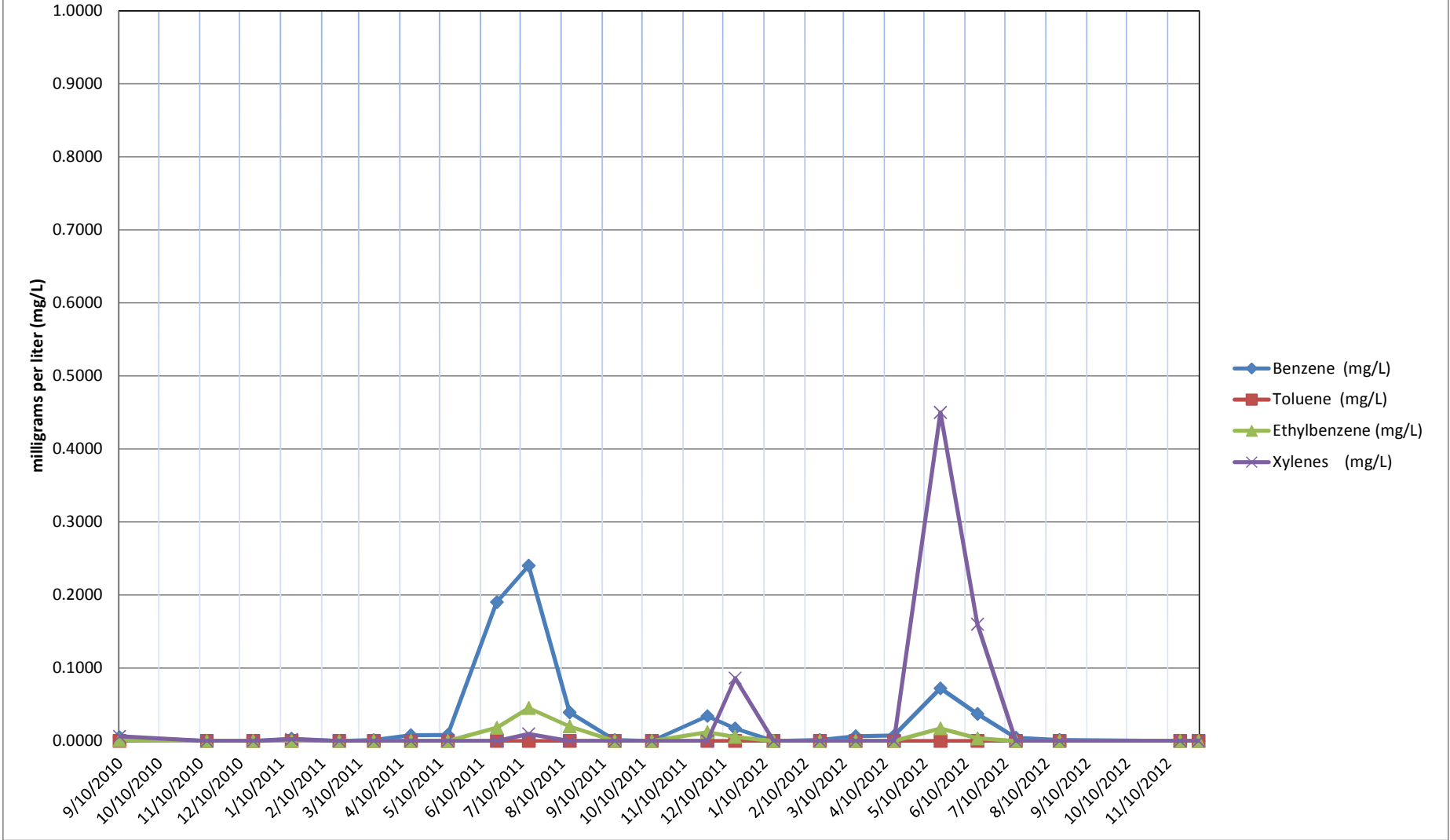
Trench/Well 7 BTEX Concentrations Over Time



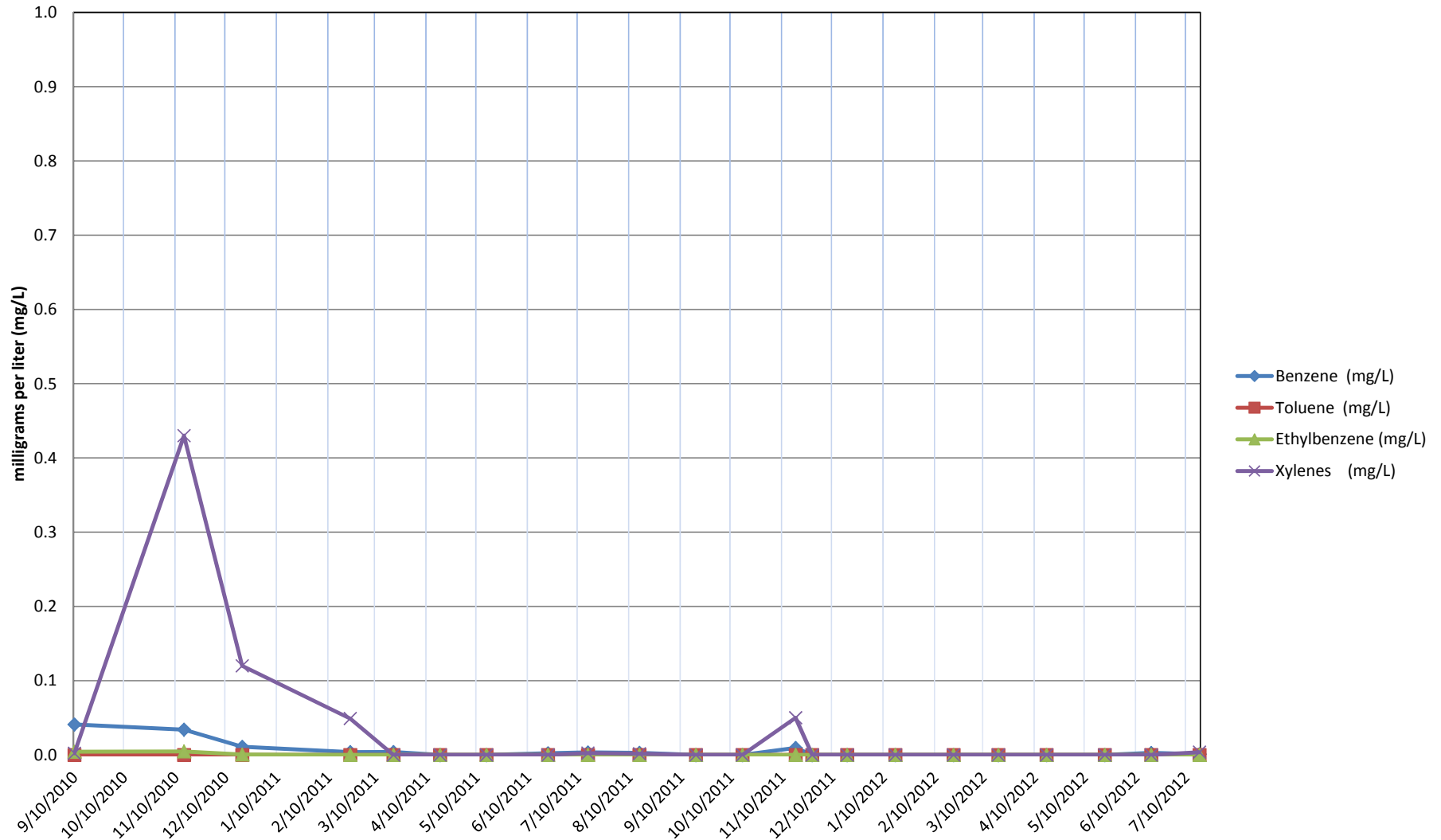
Trench/Well 8 BTEX Concentrations Over Time



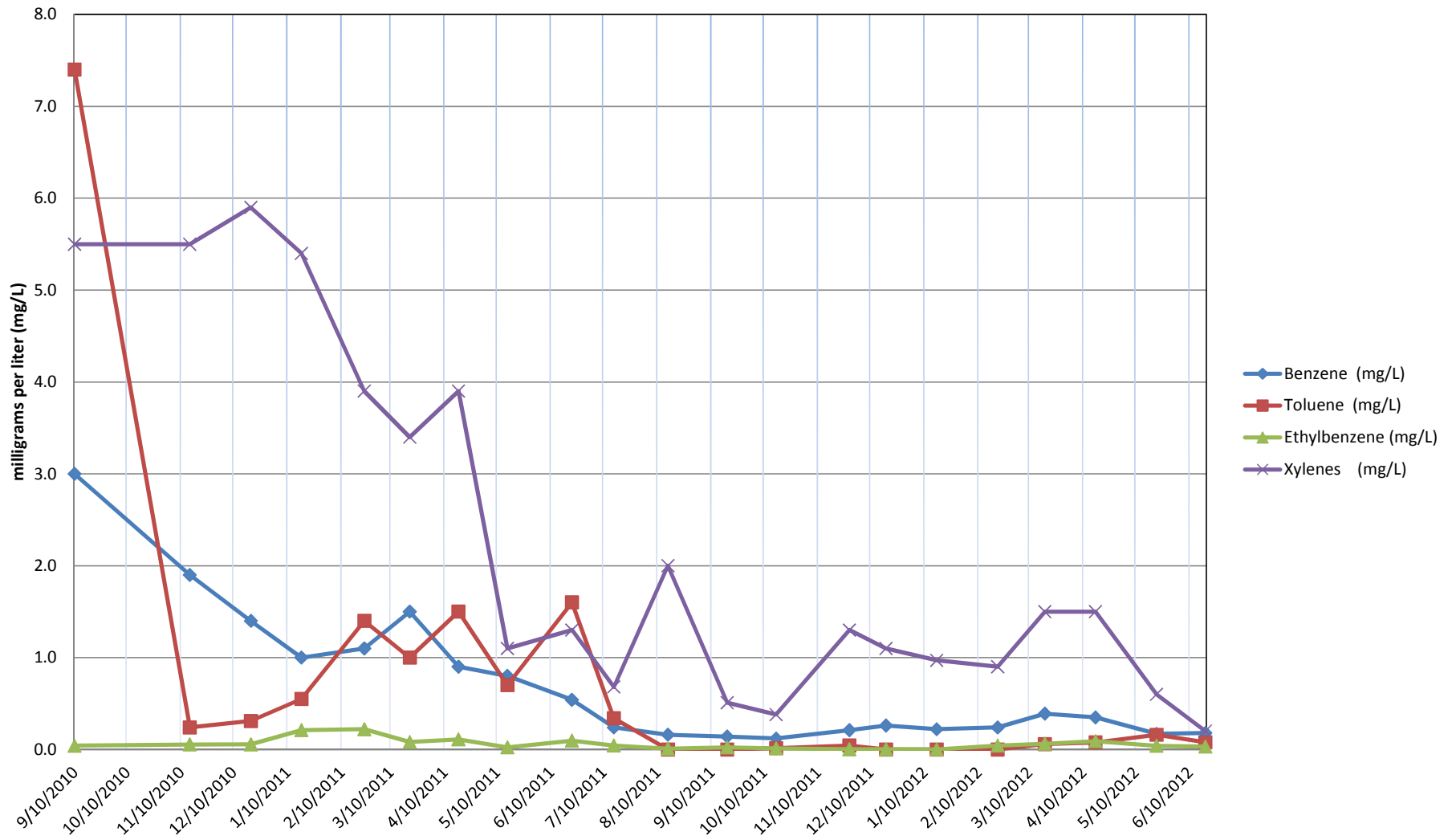
Trench/Well 9 BTEX Concentrations Over Time



Trench/Well 10 BTEX Concentrations Over Time



Trench/Well 15 BTEX Concentrations Over Time





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Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Monday March 28, 2011

Report Number: L507299

Samples Received: 03/22/11

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 03/21/11 13:05

ESC Sample # : L507299-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S1

Collected By : J. Sutrina
Collection Date : 03/21/11 13:40

ESC Sample # : L507299-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 03/21/11 13:35

ESC Sample # : L507299-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S4

Collected By : J. Sutrina
Collection Date : 03/21/11 13:30

ESC Sample # : L507299-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S6

Collected By : J. Sutrina
Collection Date : 03/21/11 13:25

ESC Sample # : L507299-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00083	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : J. Sutrina
Collection Date : 03/21/11 13:15

ESC Sample # : L507299-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : J. Sutrina
Collection Date : 03/21/11 13:10

ESC Sample # : L507299-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/23/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/23/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/23/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/23/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.0		% Rec.	8021B	03/23/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 03/21/11 13:00

ESC Sample # : L507299-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/23/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/23/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/23/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/23/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	03/23/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1A

Collected By : J. Sutrina
Collection Date : 03/21/11 11:30

ESC Sample # : L507299-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/23/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/23/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/23/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/23/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	03/23/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 03/21/11 11:25

ESC Sample # : L507299-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0022	0.00050	mg/l	8021B	03/24/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/24/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/24/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/24/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	03/24/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : J. Sutrina
Collection Date : 03/21/11 11:40

ESC Sample # : L507299-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 03/21/11 11:50

ESC Sample # : L507299-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/24/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/24/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/24/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/24/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.5		% Rec.	8021B	03/24/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 03/21/11 11:55

ESC Sample # : L507299-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/24/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/24/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/24/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/24/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.4		% Rec.	8021B	03/24/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 03/21/11 12:00

ESC Sample # : L507299-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/24/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/24/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/24/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/24/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	98.1		% Rec.	8021B	03/24/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : J. Sutrina
Collection Date : 03/21/11 12:05

ESC Sample # : L507299-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 03/21/11 12:10

ESC Sample # : L507299-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	03/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 03/21/11 12:25

ESC Sample # : L507299-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0012	0.00050	mg/l	8021B	03/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	03/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 03/21/11 12:15

ESC Sample # : L507299-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0039	0.00050	mg/l	8021B	03/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	03/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	03/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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March 28, 2011

Date Received : March 22, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 03/21/11 11:05

ESC Sample # : L507299-19

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	1.5	0.010	mg/l	8021B	03/25/11	20
Toluene	1.0	0.10	mg/l	8021B	03/25/11	20
Ethylbenzene	0.081	0.010	mg/l	8021B	03/25/11	20
Total Xylene	3.4	0.030	mg/l	8021B	03/25/11	20
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	03/25/11	20

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Summary of Remarks For Samples Printed
03/28/11 at 13:11:51

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L507299-01 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-02 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-03 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-04 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-05 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-06 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-07 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-08 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-09 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-10 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-11 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-12 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-13 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-14 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-15 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-16 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-17 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-18 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11
Sample: L507299-19 Account: CORCOMGCO Received: 03/22/11 08:30 Due Date: 03/29/11 00:00 RPT Date: 03/28/11 13:11



YOUR LAB OF CHOICE

Olsson Associates - GJ, CO
Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L507299

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March 28, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG527162	03/22/11 17:18
Ethylbenzene	< .0005	mg/l			WG527162	03/22/11 17:18
Toluene	< .005	mg/l			WG527162	03/22/11 17:18
Total Xylene	< .0015	mg/l			WG527162	03/22/11 17:18
a,a,a-Trifluorotoluene(PID)		% Rec.	105.2	55-122	WG527162	03/22/11 17:18
Benzene	< .0005	mg/l			WG527160	03/22/11 13:35
Ethylbenzene	< .0005	mg/l			WG527160	03/22/11 13:35
Toluene	< .005	mg/l			WG527160	03/22/11 13:35
Total Xylene	< .0015	mg/l			WG527160	03/22/11 13:35
a,a,a-Trifluorotoluene(PID)		% Rec.	107.3	55-122	WG527160	03/22/11 13:35
Benzene	< .0005	mg/l			WG527161	03/22/11 15:17
Ethylbenzene	< .0005	mg/l			WG527161	03/22/11 15:17
Toluene	< .005	mg/l			WG527161	03/22/11 15:17
Total Xylene	< .0015	mg/l			WG527161	03/22/11 15:17
a,a,a-Trifluorotoluene(PID)		% Rec.	92.75	55-122	WG527161	03/22/11 15:17
Benzene	< .0005	mg/l			WG527379	03/23/11 18:45
Ethylbenzene	< .0005	mg/l			WG527379	03/23/11 18:45
Toluene	< .005	mg/l			WG527379	03/23/11 18:45
Total Xylene	< .0015	mg/l			WG527379	03/23/11 18:45
a,a,a-Trifluorotoluene(PID)		% Rec.	96.51	55-122	WG527379	03/23/11 18:45
Benzene	< .0005	mg/l			WG527863	03/25/11 16:26
Ethylbenzene	< .0005	mg/l			WG527863	03/25/11 16:26
Toluene	< .005	mg/l			WG527863	03/25/11 16:26
Total Xylene	< .0015	mg/l			WG527863	03/25/11 16:26
a,a,a-Trifluorotoluene(PID)		% Rec.	108.3	55-122	WG527863	03/25/11 16:26
Benzene	< .0005	mg/l			WG527530	03/24/11 00:01
Ethylbenzene	< .0005	mg/l			WG527530	03/24/11 00:01
Toluene	< .005	mg/l			WG527530	03/24/11 00:01
Total Xylene	< .0015	mg/l			WG527530	03/24/11 00:01
a,a,a-Trifluorotoluene(PID)		% Rec.	104.0	55-122	WG527530	03/24/11 00:01

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0490	98.0	79-114	WG527162
Ethylbenzene	mg/l	.05	0.0482	96.3	80-116	WG527162
Toluene	mg/l	.05	0.0483	96.5	79-112	WG527162
Total Xylene	mg/l	.15	0.144	96.3	84-118	WG527162
a,a,a-Trifluorotoluene(PID)				102.3	55-122	WG527162
Benzene	mg/l	.05	0.0508	102.	79-114	WG527160
Ethylbenzene	mg/l	.05	0.0502	100.	80-116	WG527160
Toluene	mg/l	.05	0.0498	99.6	79-112	WG527160
Total Xylene	mg/l	.15	0.152	102.	84-118	WG527160
a,a,a-Trifluorotoluene(PID)				105.9	55-122	WG527160
Benzene	mg/l	.05	0.0501	100.	79-114	WG527161

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Ken Kreie
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Grand Junction, CO 81505

Quality Assurance Report
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Analyte	Units	Laboratory Control		Sample	% Rec	Limit	Batch
		Known Val	Result	Result			
Ethylbenzene	mg/l	.05	0.0500		100.	80-116	WG527161
Toluene	mg/l	.05	0.0498		99.6	79-112	WG527161
Total Xylene	mg/l	.15	0.153		102.	84-118	WG527161
a,a,a-Trifluorotoluene(PID)					93.61	55-122	WG527161
Benzene	mg/l	.05	0.0511		102.	79-114	WG527379
Ethylbenzene	mg/l	.05	0.0529		106.	80-116	WG527379
Toluene	mg/l	.05	0.0539		108.	79-112	WG527379
Total Xylene	mg/l	.15	0.155		104.	84-118	WG527379
a,a,a-Trifluorotoluene(PID)					91.43	55-122	WG527379
Benzene	mg/l	.05	0.0529		106.	79-114	WG527863
Ethylbenzene	mg/l	.05	0.0565		113.	80-116	WG527863
Toluene	mg/l	.05	0.0547		109.	79-112	WG527863
Total Xylene	mg/l	.15	0.175		117.	84-118	WG527863
a,a,a-Trifluorotoluene(PID)					106.2	55-122	WG527863
Benzene	mg/l	.05	0.0488		97.6	79-114	WG527530
Ethylbenzene	mg/l	.05	0.0496		99.3	80-116	WG527530
Toluene	mg/l	.05	0.0489		97.7	79-112	WG527530
Total Xylene	mg/l	.15	0.152		101.	84-118	WG527530
a,a,a-Trifluorotoluene(PID)					102.7	55-122	WG527530

Analyte	Units	Laboratory Control		Sample Duplicate	Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0507	0.0490	101.	79-114	3.39	20	WG527162
Ethylbenzene	mg/l	0.0499	0.0482	100.	80-116	3.44	20	WG527162
Toluene	mg/l	0.0494	0.0483	99.0	79-112	2.38	20	WG527162
Total Xylene	mg/l	0.149	0.144	99.0	84-118	2.81	20	WG527162
a,a,a-Trifluorotoluene(PID)				102.9	55-122			WG527162
Benzene	mg/l	0.0521	0.0508	104.	79-114	2.57	20	WG527160
Ethylbenzene	mg/l	0.0508	0.0502	102.	80-116	1.07	20	WG527160
Toluene	mg/l	0.0507	0.0498	101.	79-112	1.67	20	WG527160
Total Xylene	mg/l	0.154	0.152	102.	84-118	1.07	20	WG527160
a,a,a-Trifluorotoluene(PID)				106.1	55-122			WG527160
Benzene	mg/l	0.0505	0.0501	101.	79-114	0.880	20	WG527161
Ethylbenzene	mg/l	0.0501	0.0500	100.	80-116	0.160	20	WG527161
Toluene	mg/l	0.0501	0.0498	100.	79-112	0.600	20	WG527161
Total Xylene	mg/l	0.153	0.153	102.	84-118	0.340	20	WG527161
a,a,a-Trifluorotoluene(PID)				93.58	55-122			WG527161
Benzene	mg/l	0.0494	0.0511	99.0	79-114	3.37	20	WG527379
Ethylbenzene	mg/l	0.0508	0.0529	102.	80-116	4.03	20	WG527379
Toluene	mg/l	0.0515	0.0539	103.	79-112	4.53	20	WG527379
Total Xylene	mg/l	0.147	0.155	98.0	84-118	5.41	20	WG527379
a,a,a-Trifluorotoluene(PID)				95.25	55-122			WG527379
Benzene	mg/l	0.0534	0.0529	107.	79-114	1.01	20	WG527863
Ethylbenzene	mg/l	0.0564	0.0565	113.	80-116	0.150	20	WG527863

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Ken Kreie
826 21 1/2 Road

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Quality Assurance Report
Level II

L507299

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Tax I.D. 62-0814289

Est. 1970

March 28, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Toluene	mg/l	0.0547	0.0547	109.	79-112	0.0500	20	WG527863
Total Xylene	mg/l	0.175	0.175	116.	84-118	0.180	20	WG527863
a,a,a-Trifluorotoluene(PID)				105.7	55-122			WG527863
Benzene	mg/l	0.0511	0.0488	102.	79-114	4.52	20	WG527530
Ethylbenzene	mg/l	0.0515	0.0496	103.	80-116	3.79	20	WG527530
Toluene	mg/l	0.0504	0.0489	101.	79-112	3.15	20	WG527530
Total Xylene	mg/l	0.157	0.152	105.	84-118	3.54	20	WG527530
a,a,a-Trifluorotoluene(PID)				103.6	55-122			WG527530

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Benzene	mg/l	0.0453	0	.05	90.6	35-147	L507299-11	WG527162
Ethylbenzene	mg/l	0.0449	0	.05	89.9	39-141	L507299-11	WG527162
Toluene	mg/l	0.0455	0	.05	91.0	35-148	L507299-11	WG527162
Total Xylene	mg/l	0.135	0	.15	90.1	33-151	L507299-11	WG527162
a,a,a-Trifluorotoluene(PID)					100.1	55-122		WG527162
Benzene	mg/l	0.138	0.0750	.05	126.	35-147	L507141-01	WG527160
Ethylbenzene	mg/l	0.0662	0.0120	.05	108.	39-141	L507141-01	WG527160
Toluene	mg/l	0.0580	0	.05	116.	35-148	L507141-01	WG527160
Total Xylene	mg/l	0.178	0.0110	.15	111.	33-151	L507141-01	WG527160
a,a,a-Trifluorotoluene(PID)					103.1	55-122		WG527160
Benzene	mg/l	0.0492	0	.05	98.4	35-147	L507276-01	WG527161
Ethylbenzene	mg/l	0.0492	0	.05	98.4	39-141	L507276-01	WG527161
Toluene	mg/l	0.0495	0	.05	99.0	35-148	L507276-01	WG527161
Total Xylene	mg/l	0.150	0	.15	100.	33-151	L507276-01	WG527161
a,a,a-Trifluorotoluene(PID)					94.69	55-122		WG527161
Benzene	mg/l	0.0395	0	.05	79.0	35-147	L507236-02	WG527379
Ethylbenzene	mg/l	0.0405	0	.05	81.1	39-141	L507236-02	WG527379
Toluene	mg/l	0.0419	0	.05	83.8	35-148	L507236-02	WG527379
Total Xylene	mg/l	0.117	0	.15	77.7	33-151	L507236-02	WG527379
a,a,a-Trifluorotoluene(PID)					89.83	55-122		WG527379
Benzene	mg/l	0.0520	0.00120	.05	102.	35-147	L507299-17	WG527863
Ethylbenzene	mg/l	0.0553	0	.05	111.	39-141	L507299-17	WG527863
Toluene	mg/l	0.0533	0	.05	106.	35-148	L507299-17	WG527863
Total Xylene	mg/l	0.172	0	.15	114.	33-151	L507299-17	WG527863
a,a,a-Trifluorotoluene(PID)					105.0	55-122		WG527863
Benzene	mg/l	0.0488	0	.05	97.7	35-147	L507542-01	WG527530
Ethylbenzene	mg/l	0.0499	0	.05	99.8	39-141	L507542-01	WG527530
Toluene	mg/l	0.0488	0	.05	97.6	35-148	L507542-01	WG527530
Total Xylene	mg/l	0.152	0	.15	101.	33-151	L507542-01	WG527530
a,a,a-Trifluorotoluene(PID)					102.6	55-122		WG527530

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0498	0.0453	99.5	35-147	9.36	20	L507299-11	WG527162
* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'									



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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Ethylbenzene	mg/l	0.0491	0.0449	98.2	39-141	8.88	20	L507299-11	WG527162
Toluene	mg/l	0.0487	0.0455	97.4	35-148	6.84	20	L507299-11	WG527162
Total Xylene	mg/l	0.147	0.135	97.7	33-151	8.11	20	L507299-11	WG527162
a,a,a-Trifluorotoluene(PID)				103.3	55-122				WG527162
Benzene	mg/l	0.135	0.138	120.	35-147	1.98	20	L507141-01	WG527160
Ethylbenzene	mg/l	0.0667	0.0662	109.	39-141	0.650	20	L507141-01	WG527160
Toluene	mg/l	0.0573	0.0580	115.	35-148	1.15	20	L507141-01	WG527160
Total Xylene	mg/l	0.181	0.178	113.	33-151	1.56	20	L507141-01	WG527160
a,a,a-Trifluorotoluene(PID)				103.5	55-122				WG527160
Benzene	mg/l	0.0469	0.0492	93.7	35-147	4.88	20	L507276-01	WG527161
Ethylbenzene	mg/l	0.0461	0.0492	92.3	39-141	6.47	20	L507276-01	WG527161
Toluene	mg/l	0.0468	0.0495	93.6	35-148	5.55	20	L507276-01	WG527161
Total Xylene	mg/l	0.140	0.150	93.5	33-151	7.01	20	L507276-01	WG527161
a,a,a-Trifluorotoluene(PID)				92.51	55-122				WG527161
Benzene	mg/l	0.0377	0.0395	75.4	35-147	4.61	20	L507236-02	WG527379
Ethylbenzene	mg/l	0.0391	0.0405	78.2	39-141	3.57	20	L507236-02	WG527379
Toluene	mg/l	0.0400	0.0419	79.9	35-148	4.69	20	L507236-02	WG527379
Total Xylene	mg/l	0.113	0.117	75.0	33-151	3.56	20	L507236-02	WG527379
a,a,a-Trifluorotoluene(PID)				94.24	55-122				WG527379
Benzene	mg/l	0.0526	0.0520	103.	35-147	1.03	20	L507299-17	WG527863
Ethylbenzene	mg/l	0.0550	0.0553	110.	39-141	0.470	20	L507299-17	WG527863
Toluene	mg/l	0.0531	0.0533	106.	35-148	0.210	20	L507299-17	WG527863
Total Xylene	mg/l	0.171	0.172	114.	33-151	0.700	20	L507299-17	WG527863
a,a,a-Trifluorotoluene(PID)				105.4	55-122				WG527863
Benzene	mg/l	0.0503	0.0488	101.	35-147	3.03	20	L507542-01	WG527530
Ethylbenzene	mg/l	0.0513	0.0499	102.	39-141	2.71	20	L507542-01	WG527530
Toluene	mg/l	0.0495	0.0488	99.0	35-148	1.52	20	L507542-01	WG527530
Total Xylene	mg/l	0.156	0.152	104.	33-151	2.61	20	L507542-01	WG527530
a,a,a-Trifluorotoluene(PID)				102.3	55-122				WG527530

Batch number /Run number / Sample number cross reference

WG527162: R1621589: L507299-11 15 16
WG527160: R1621649: L507299-01 02 03 04 05 06
WG527161: R1622909: L507299-07 08 09
WG527379: R1623949: L507299-12 13 14
WG527863: R1625489: L507299-17 18 19
WG527530: R1626115: L507299-10

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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March 28, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
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Grand Junction, CO 81505

Report Summary

Monday April 25, 2011

Report Number: L511955

Samples Received: 04/19/11

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
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826 21 1/2 Road
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April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : Brian Swedhin
Collection Date : 04/18/11 10:50

ESC Sample # : L511955-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.90	0.0050	mg/l	8021B	04/20/11	10
Toluene	1.5	0.050	mg/l	8021B	04/20/11	10
Ethylbenzene	0.11	0.0050	mg/l	8021B	04/20/11	10
Total Xylene	3.9	0.015	mg/l	8021B	04/20/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.8		% Rec.	8021B	04/20/11	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Ken Kreie
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Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : Brian Swedhin
Collection Date : 04/18/11 11:00

ESC Sample # : L511955-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1A

Collected By : Brian Swedhin
Collection Date : 04/18/11 11:10

ESC Sample # : L511955-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	92.1		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : Brian Swedhin
Collection Date : 04/18/11 11:20

ESC Sample # : L511955-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : Brian Swedhin
Collection Date : 04/18/11 11:35

ESC Sample # : L511955-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : Brian Swedhin
Collection Date : 04/18/11 11:40

ESC Sample # : L511955-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : Brian Swedhin
Collection Date : 04/18/11 11:50

ESC Sample # : L511955-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00070	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.8		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : Brian Swedhin
Collection Date : 04/18/11 11:55

ESC Sample # : L511955-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : Brian Swedhin
Collection Date : 04/18/11 12:05

ESC Sample # : L511955-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : Brian Swedhin
Collection Date : 04/18/11 12:15

ESC Sample # : L511955-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : Brian Swedhin
Collection Date : 04/18/11 12:25

ESC Sample # : L511955-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0078	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.2		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : OG1

Collected By : Brian Swedhin
Collection Date : 04/18/11 12:50

ESC Sample # : L511955-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : Brian Swedhin
Collection Date : 04/18/11 12:55

ESC Sample # : L511955-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.2		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : Brian Swedhin
Collection Date : 04/18/11 13:00

ESC Sample # : L511955-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : Brian Swedhin
Collection Date : 04/18/11 13:10

ESC Sample # : L511955-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	98.5		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
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826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S6

Collected By : Brian Swedhin
Collection Date : 04/18/11 13:15

ESC Sample # : L511955-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0015	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.7		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : Brian Swedhin
Collection Date : 04/18/11 13:25

ESC Sample # : L511955-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 25, 2011

Date Received : April 19, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S1

Collected By : Brian Swedhin
Collection Date : 04/18/11 13:30

ESC Sample # : L511955-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	04/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/20/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	83.7		% Rec.	8021B	04/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Summary of Remarks For Samples Printed
04/25/11 at 11:59:45

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L511955-01 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-02 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-03 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-04 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-05 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-06 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-07 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-08 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-09 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-10 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-11 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-12 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-13 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-14 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-15 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-16 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-17 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59
Sample: L511955-18 Account: CORCOMGCO Received: 04/19/11 09:00 Due Date: 04/26/11 00:00 RPT Date: 04/25/11 11:59



YOUR LAB OF CHOICE

Olsson Associates - GJ, CO
Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L511955

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April 25, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG531828	04/20/11 12:39
Ethylbenzene	< .0005	mg/l			WG531828	04/20/11 12:39
Toluene	< .005	mg/l			WG531828	04/20/11 12:39
Total Xylene	< .0015	mg/l			WG531828	04/20/11 12:39
a,a,a-Trifluorotoluene(PID)		% Rec.	99.23	55-122	WG531828	04/20/11 12:39

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0468	93.6	79-114	WG531828
Ethylbenzene	mg/l	.05	0.0498	99.6	80-116	WG531828
Toluene	mg/l	.05	0.0496	99.2	79-112	WG531828
Total Xylene	mg/l	.15	0.148	98.6	84-118	WG531828
a,a,a-Trifluorotoluene(PID)				104.3	55-122	WG531828

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0497	0.0468	99.0	79-114	6.02	20	WG531828
Ethylbenzene	mg/l	0.0530	0.0498	106.	80-116	6.26	20	WG531828
Toluene	mg/l	0.0527	0.0496	105.	79-112	6.12	20	WG531828
Total Xylene	mg/l	0.157	0.148	105.	84-118	5.98	20	WG531828
a,a,a-Trifluorotoluene(PID)				99.09	55-122			WG531828

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/l	0.0485	0	.05	96.9	35-147	L511955-02	WG531828
Ethylbenzene	mg/l	0.0527	0	.05	105.	39-141	L511955-02	WG531828
Toluene	mg/l	0.0492	0	.05	98.4	35-148	L511955-02	WG531828
Total Xylene	mg/l	0.156	0	.15	104.	33-151	L511955-02	WG531828
a,a,a-Trifluorotoluene(PID)					98.87	55-122		WG531828

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0461	0.0485	92.1	35-147	5.06	20	L511955-02	WG531828
Ethylbenzene	mg/l	0.0499	0.0527	99.7	39-141	5.56	20	L511955-02	WG531828
Toluene	mg/l	0.0461	0.0492	92.2	35-148	6.49	20	L511955-02	WG531828
Total Xylene	mg/l	0.148	0.156	98.6	33-151	5.08	20	L511955-02	WG531828
a,a,a-Trifluorotoluene(PID)				97.75	55-122				WG531828

Batch number /Run number / Sample number cross reference

WG531828: R1661709: L511955-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

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Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L511955

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Est. 1970

April 25, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Friday May 20, 2011

Report Number: L516437

Samples Received: 05/17/11

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 05/16/11 10:10

ESC Sample # : L516437-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.80	0.0050	mg/l	8021B	05/20/11	10
Toluene	0.70	0.050	mg/l	8021B	05/20/11	10
Ethylbenzene	0.023	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	1.1	0.015	mg/l	8021B	05/20/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.2		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 05/16/11 10:20

ESC Sample # : L516437-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0041	0.00050	mg/l	8021B	05/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	0.0052	0.0015	mg/l	8021B	05/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1A

Collected By : J. Sutrina
Collection Date : 05/16/11 10:30

ESC Sample # : L516437-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : J. Sutrina
Collection Date : 05/16/11 10:35

ESC Sample # : L516437-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P3

Collected By : J. Sutrina
Collection Date : 05/16/11 10:45

ESC Sample # : L516437-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00075	0.00050	mg/l	8021B	05/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 05/16/11 11:00

ESC Sample # : L516437-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 05/16/11 11:05

ESC Sample # : L516437-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 05/16/11 11:15

ESC Sample # : L516437-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0022	0.00050	mg/l	8021B	05/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : J. Sutrina
Collection Date : 05/16/11 11:20

ESC Sample # : L516437-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 05/16/11 11:25

ESC Sample # : L516437-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 05/16/11 11:40

ESC Sample # : L516437-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 05/16/11 11:50

ESC Sample # : L516437-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0081	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 05/16/11 12:05

ESC Sample # : L516437-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 05/16/11 12:15

ESC Sample # : L516437-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : J. Sutrina
Collection Date : 05/16/11 12:25

ESC Sample # : L516437-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00083	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	0.00076	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : J. Sutrina
Collection Date : 05/16/11 12:30

ESC Sample # : L516437-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S6

Collected By : J. Sutrina
Collection Date : 05/16/11 12:40

ESC Sample # : L516437-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 05/16/11 12:45

ESC Sample # : L516437-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

May 20, 2011

Date Received : May 17, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S1

Collected By : J. Sutrina
Collection Date : 05/16/11 12:55

ESC Sample # : L516437-19

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	05/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/18/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 05/20/11 14:39 Printed: 05/20/11 14:39

Summary of Remarks For Samples Printed
05/20/11 at 14:39:58

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L516437-01 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-02 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-03 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-04 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-05 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-06 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-07 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-08 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-09 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-10 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-11 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-12 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-13 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-14 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-15 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-16 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-17 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-18 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39
Sample: L516437-19 Account: CORCOMGCO Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/20/11 14:39



YOUR LAB OF CHOICE

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Quality Assurance Report
Level II

L516437

May 20, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG536258	05/18/11 13:09
Ethylbenzene	< .0005	mg/l			WG536258	05/18/11 13:09
Toluene	< .005	mg/l			WG536258	05/18/11 13:09
Total Xylene	< .0015	mg/l			WG536258	05/18/11 13:09
a,a,a-Trifluorotoluene(PID)		% Rec.	104.4	55-122	WG536258	05/18/11 13:09
Benzene	< .0005	mg/l			WG536257	05/19/11 04:56
Ethylbenzene	< .0005	mg/l			WG536257	05/19/11 04:56
Toluene	< .005	mg/l			WG536257	05/19/11 04:56
Total Xylene	< .0015	mg/l			WG536257	05/19/11 04:56
a,a,a-Trifluorotoluene(PID)		% Rec.	104.6	55-122	WG536257	05/19/11 04:56
Benzene	< .0005	mg/l			WG536606	05/20/11 01:19
Toluene	< .005	mg/l			WG536606	05/20/11 01:19
Total Xylene	< .0015	mg/l			WG536606	05/20/11 01:19
a,a,a-Trifluorotoluene(PID)		% Rec.	102.2	55-122	WG536606	05/20/11 01:19

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0472	94.5	79-114	WG536258
Ethylbenzene	mg/l	.05	0.0468	93.7	80-116	WG536258
Toluene	mg/l	.05	0.0471	94.3	79-112	WG536258
Total Xylene	mg/l	.15	0.142	94.4	84-118	WG536258
a,a,a-Trifluorotoluene(PID)				102.6	55-122	WG536258
Benzene	mg/l	.05	0.0461	92.3	79-114	WG536257
Ethylbenzene	mg/l	.05	0.0458	91.6	80-116	WG536257
Toluene	mg/l	.05	0.0454	90.9	79-112	WG536257
Total Xylene	mg/l	.15	0.143	95.1	84-118	WG536257
a,a,a-Trifluorotoluene(PID)				104.0	55-122	WG536257
Benzene	mg/l	.05	0.0527	105.	79-114	WG536606
Toluene	mg/l	.05	0.0555	111.	79-112	WG536606
Total Xylene	mg/l	.15	0.163	109.	84-118	WG536606
a,a,a-Trifluorotoluene(PID)				102.9	55-122	WG536606

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0470	0.0472	94.0	79-114	0.420	20	WG536258
Ethylbenzene	mg/l	0.0474	0.0468	95.0	80-116	1.29	20	WG536258
Toluene	mg/l	0.0471	0.0471	94.0	79-112	0.100	20	WG536258
Total Xylene	mg/l	0.144	0.142	96.0	84-118	1.94	20	WG536258
a,a,a-Trifluorotoluene(PID)				103.5	55-122			WG536258
Benzene	mg/l	0.0503	0.0461	101.	79-114	8.63	20	WG536257
Ethylbenzene	mg/l	0.0506	0.0458	101.	80-116	10.1	20	WG536257
Toluene	mg/l	0.0500	0.0454	100.	79-112	9.63	20	WG536257
Total Xylene	mg/l	0.157	0.143	105.	84-118	9.92	20	WG536257
a,a,a-Trifluorotoluene(PID)				103.0	55-122			WG536257
Benzene	mg/l	0.0527	0.0527	105.	79-114	0.0800	20	WG536606

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report
Level II

L516437

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May 20, 2011

Analyte	Units	Laboratory Control		Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec					
Toluene	mg/l	0.0551	0.0555	110.		79-112	0.620	20	WG536606
Total Xylene	mg/l	0.158	0.163	105.		84-118	3.19	20	WG536606
a,a,a-Trifluorotoluene(PID)				103.1		55-122			WG536606

Analyte	Units	MS Res	Matrix Spike		TV	% Rec	Limit	Ref Samp	Batch
			Ref Res						
Benzene	mg/l	0.0439	0	.05	87.8		35-147	L516437-10	WG536258
Ethylbenzene	mg/l	0.0435	0	.05	87.0		39-141	L516437-10	WG536258
Toluene	mg/l	0.0446	0	.05	89.1		35-148	L516437-10	WG536258
Total Xylene	mg/l	0.133	0	.15	88.8		33-151	L516437-10	WG536258
a,a,a-Trifluorotoluene(PID)					103.0		55-122		WG536258
Benzene	mg/l	0.0469	0	.05	93.8		35-147	L515956-16	WG536257
Ethylbenzene	mg/l	0.0441	0	.05	88.2		39-141	L515956-16	WG536257
Toluene	mg/l	0.0452	0	.05	90.4		35-148	L515956-16	WG536257
Total Xylene	mg/l	0.137	0	.15	91.0		33-151	L515956-16	WG536257
a,a,a-Trifluorotoluene(PID)					104.7		55-122		WG536257
Benzene	mg/l	0.0511	0	.05	102.		35-147	L516357-01	WG536606
Toluene	mg/l	0.0534	0	.05	107.		35-148	L516357-01	WG536606
Total Xylene	mg/l	0.154	0	.15	102.		33-151	L516357-01	WG536606
a,a,a-Trifluorotoluene(PID)					101.9		55-122		WG536606

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0470	0.0439	94.0	35-147	6.90	20	L516437-10	WG536258
Ethylbenzene	mg/l	0.0472	0.0435	94.3	39-141	8.10	20	L516437-10	WG536258
Toluene	mg/l	0.0472	0.0446	94.4	35-148	5.72	20	L516437-10	WG536258
Total Xylene	mg/l	0.145	0.133	96.9	33-151	8.67	20	L516437-10	WG536258
a,a,a-Trifluorotoluene(PID)				102.6	55-122				WG536258
Benzene	mg/l	0.0478	0.0469	95.6	35-147	1.88	20	L515956-16	WG536257
Ethylbenzene	mg/l	0.0483	0.0441	96.5	39-141	9.01	20	L515956-16	WG536257
Toluene	mg/l	0.0474	0.0452	94.7	35-148	4.66	20	L515956-16	WG536257
Total Xylene	mg/l	0.151	0.137	100.	33-151	9.80	20	L515956-16	WG536257
a,a,a-Trifluorotoluene(PID)				103.4	55-122				WG536257
Benzene	mg/l	0.0511	0.0511	102.	35-147	0.0100	20	L516357-01	WG536606
Toluene	mg/l	0.0534	0.0534	107.	35-148	0.0700	20	L516357-01	WG536606
Total Xylene	mg/l	0.150	0.154	100.	33-151	2.52	20	L516357-01	WG536606
a,a,a-Trifluorotoluene(PID)				102.6	55-122				WG536606

Batch number /Run number / Sample number cross reference

WG536257: R1692714: L516437-01 02 03 04 05 06 07 08 09
WG536258: R1692715: L516437-10 11 12 13 14 15 16 17 18 19
WG536606: R1694649: L516437-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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May 20, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Grand Junction, CO 81505

Report Summary

Wednesday June 29, 2011

Report Number: L522728

Samples Received: 06/23/11

Client Project: 010-1708

Description: Oxy TY Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

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June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-15

Collected By : J. Sutrina
Collection Date : 06/22/11 10:40

ESC Sample # : L522728-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.54	0.0050	mg/l	8021B	06/25/11	10
Toluene	1.6	0.050	mg/l	8021B	06/25/11	10
Ethylbenzene	0.096	0.0050	mg/l	8021B	06/25/11	10
Total Xylene	1.3	0.015	mg/l	8021B	06/25/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	06/25/11	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-1

Collected By : J. Sutrina
Collection Date : 06/22/11 10:50

ESC Sample # : L522728-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-1A

Collected By : J. Sutrina
Collection Date : 06/22/11 11:05

ESC Sample # : L522728-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-2

Collected By : J. Sutrina
Collection Date : 06/22/11 11:15

ESC Sample # : L522728-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-3

Collected By : J. Sutrina
Collection Date : 06/22/11 11:25

ESC Sample # : L522728-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0016	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-4

Collected By : J. Sutrina
Collection Date : 06/22/11 11:35

ESC Sample # : L522728-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-5

Collected By : J. Sutrina
Collection Date : 06/22/11 11:45

ESC Sample # : L522728-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0059	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-6

Collected By : J. Sutrina
Collection Date : 06/22/11 11:50

ESC Sample # : L522728-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0050	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-7

Collected By : J. Sutrina
Collection Date : 06/22/11 12:00

ESC Sample # : L522728-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/25/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/25/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/25/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	06/25/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-8

Collected By : J. Sutrina
Collection Date : 06/22/11 12:10

ESC Sample # : L522728-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-10

Collected By : J. Sutrina
Collection Date : 06/22/11 12:20

ESC Sample # : L522728-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0022	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : P-9

Collected By : J. Sutrina
Collection Date : 06/22/11 12:30

ESC Sample # : L522728-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.19	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	0.018	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.7		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : DG-1

Collected By : J. Sutrina
Collection Date : 06/22/11 12:50

ESC Sample # : L522728-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : S-11

Collected By : J. Sutrina
Collection Date : 06/22/11 13:00

ESC Sample # : L522728-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : S-9

Collected By : J. Sutrina
Collection Date : 06/22/11 13:05

ESC Sample # : L522728-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : S-7

Collected By : J. Sutrina
Collection Date : 06/22/11 13:20

ESC Sample # : L522728-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : S-6

Collected By : J. Sutrina
Collection Date : 06/22/11 13:30

ESC Sample # : L522728-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : S-3

Collected By : J. Sutrina
Collection Date : 06/22/11 13:35

ESC Sample # : L522728-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	06/26/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 29, 2011

Date Received : June 23, 2011
Description : Oxy TY Ranch 17-5

Sample ID : S-1

Collected By : J. Sutrina
Collection Date : 06/22/11 13:45

ESC Sample # : L522728-19

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/29/11	1
Toluene	BDL	0.0050	mg/l	8021B	06/29/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/29/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/29/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	06/29/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Summary of Remarks For Samples Printed
06/29/11 at 16:49:45

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L522728-01 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-02 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-03 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-04 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-05 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-06 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-07 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-08 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-09 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-10 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-11 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-12 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-13 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-14 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-15 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-16 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-17 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-18 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49
Sample: L522728-19 Account: CORCOMGCO Received: 06/23/11 09:00 Due Date: 06/30/11 00:00 RPT Date: 06/29/11 16:49



YOUR LAB OF CHOICE

Olsson Associates - GJ, CO
Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L522728

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 29, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG542556	06/25/11 09:39
Ethylbenzene	< .0005	mg/l			WG542556	06/25/11 09:39
Toluene	< .005	mg/l			WG542556	06/25/11 09:39
Total Xylene	< .0015	mg/l			WG542556	06/25/11 09:39
a,a,a-Trifluorotoluene(PID)		% Rec.	102.6	55-122	WG542556	06/25/11 09:39
Benzene	< .0005	mg/l			WG542615	06/25/11 21:08
Ethylbenzene	< .0005	mg/l			WG542615	06/25/11 21:08
Toluene	< .005	mg/l			WG542615	06/25/11 21:08
Total Xylene	< .0015	mg/l			WG542615	06/25/11 21:08
a,a,a-Trifluorotoluene(PID)		% Rec.	96.44	55-122	WG542615	06/25/11 21:08
Benzene	< .0005	mg/l			WG542617	06/26/11 02:33
Ethylbenzene	< .0005	mg/l			WG542617	06/26/11 02:33
Toluene	< .005	mg/l			WG542617	06/26/11 02:33
Total Xylene	< .0015	mg/l			WG542617	06/26/11 02:33
a,a,a-Trifluorotoluene(PID)		% Rec.	101.2	55-122	WG542617	06/26/11 02:33
Benzene	< .0005	mg/l			WG543110	06/28/11 18:32
Ethylbenzene	< .0005	mg/l			WG543110	06/28/11 18:32
Toluene	< .005	mg/l			WG543110	06/28/11 18:32
Total Xylene	< .0015	mg/l			WG543110	06/28/11 18:32
a,a,a-Trifluorotoluene(PID)		% Rec.	99.74	55-122	WG543110	06/28/11 18:32

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0537	107.	79-114	WG542556
Ethylbenzene	mg/l	.05	0.0536	107.	80-116	WG542556
Toluene	mg/l	.05	0.0526	105.	79-112	WG542556
Total Xylene	mg/l	.15	0.159	106.	84-118	WG542556
a,a,a-Trifluorotoluene(PID)				103.2	55-122	WG542556
Benzene	mg/l	.05	0.0483	96.6	79-114	WG542615
Ethylbenzene	mg/l	.05	0.0506	101.	80-116	WG542615
Toluene	mg/l	.05	0.0497	99.3	79-112	WG542615
Total Xylene	mg/l	.15	0.154	103.	84-118	WG542615
a,a,a-Trifluorotoluene(PID)				106.2	55-122	WG542615
Benzene	mg/l	.05	0.0443	88.5	79-114	WG542617
Ethylbenzene	mg/l	.05	0.0428	85.5	80-116	WG542617
Toluene	mg/l	.05	0.0429	85.8	79-112	WG542617
Total Xylene	mg/l	.15	0.131	87.0	84-118	WG542617
a,a,a-Trifluorotoluene(PID)				100.8	55-122	WG542617
Benzene	mg/l	.05	0.0479	95.7	79-114	WG543110
Ethylbenzene	mg/l	.05	0.0498	99.6	80-116	WG543110
Toluene	mg/l	.05	0.0470	94.0	79-112	WG543110
Total Xylene	mg/l	.15	0.145	96.7	84-118	WG543110
a,a,a-Trifluorotoluene(PID)				100.1	55-122	WG543110

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Ken Kreie
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Est. 1970

June 29, 2011

Analyte	Units	Laboratory Control		Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec					
Benzene	mg/l	0.0543	0.0537	109.		79-114	1.27	20	WG542556
Ethylbenzene	mg/l	0.0530	0.0536	106.		80-116	1.27	20	WG542556
Toluene	mg/l	0.0525	0.0526	105.		79-112	0.120	20	WG542556
Total Xylene	mg/l	0.156	0.159	104.		84-118	2.30	20	WG542556
a,a,a-Trifluorotoluene(PID)				100.0		55-122			WG542556
Benzene	mg/l	0.0459	0.0483	92.0		79-114	5.04	20	WG542615
Ethylbenzene	mg/l	0.0481	0.0506	96.0		80-116	4.99	20	WG542615
Toluene	mg/l	0.0473	0.0497	94.0		79-112	4.97	20	WG542615
Total Xylene	mg/l	0.147	0.154	98.0		84-118	5.02	20	WG542615
a,a,a-Trifluorotoluene(PID)				98.22		55-122			WG542615
Benzene	mg/l	0.0466	0.0443	93.0		79-114	5.12	20	WG542617
Ethylbenzene	mg/l	0.0450	0.0428	90.0		80-116	5.14	20	WG542617
Toluene	mg/l	0.0450	0.0429	90.0		79-112	4.77	20	WG542617
Total Xylene	mg/l	0.137	0.131	92.0		84-118	5.10	20	WG542617
a,a,a-Trifluorotoluene(PID)				100.4		55-122			WG542617
Benzene	mg/l	0.0496	0.0479	99.0		79-114	3.61	20	WG543110
Ethylbenzene	mg/l	0.0514	0.0498	103.		80-116	3.15	20	WG543110
Toluene	mg/l	0.0488	0.0470	98.0		79-112	3.80	20	WG543110
Total Xylene	mg/l	0.149	0.145	100.		84-118	3.06	20	WG543110
a,a,a-Trifluorotoluene(PID)				100.2		55-122			WG543110

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0604	0.00780	.05	105.	35-147	L522471-20	WG542556
Ethylbenzene	mg/l	0.0538	0.00280	.05	102.	39-141	L522471-20	WG542556
Toluene	mg/l	0.0675	0.0150	.05	105.	35-148	L522471-20	WG542556
Total Xylene	mg/l	0.164	0.0130	.15	101.	33-151	L522471-20	WG542556
a,a,a-Trifluorotoluene(PID)					102.8	55-122		WG542556
Benzene	mg/l	0.0439	0	.05	87.7	35-147	L522682-01	WG542615
Ethylbenzene	mg/l	0.0465	0	.05	93.0	39-141	L522682-01	WG542615
Toluene	mg/l	0.0456	0	.05	91.1	35-148	L522682-01	WG542615
Total Xylene	mg/l	0.142	0	.15	95.0	33-151	L522682-01	WG542615
a,a,a-Trifluorotoluene(PID)					102.1	55-122		WG542615
Benzene	mg/l	0.0414	0.00220	.05	78.5	35-147	L522728-11	WG542617
Ethylbenzene	mg/l	0.0385	0	.05	77.0	39-141	L522728-11	WG542617
Toluene	mg/l	0.0389	0	.05	77.8	35-148	L522728-11	WG542617
Total Xylene	mg/l	0.118	0	.15	78.5	33-151	L522728-11	WG542617
a,a,a-Trifluorotoluene(PID)					99.64	55-122		WG542617
Benzene	mg/l	0.0466	0	.05	93.2	35-147	L522625-07	WG543110
Ethylbenzene	mg/l	0.0487	0	.05	97.5	39-141	L522625-07	WG543110
Toluene	mg/l	0.0467	0	.05	93.4	35-148	L522625-07	WG543110
Total Xylene	mg/l	0.144	0	.15	95.7	33-151	L522625-07	WG543110
a,a,a-Trifluorotoluene(PID)					100.4	55-122		WG543110

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Analyte	Units	MSD	Matrix Spike	Duplicate	Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
Benzene	mg/l	0.0599	0.0604	104.	35-147	0.890	20	L522471-20		WG542556
Ethylbenzene	mg/l	0.0530	0.0538	100.	39-141	1.35	20	L522471-20		WG542556
Toluene	mg/l	0.0668	0.0675	104.	35-148	0.970	20	L522471-20		WG542556
Total Xylene	mg/l	0.161	0.164	98.8	33-151	1.93	20	L522471-20		WG542556
a,a,a-Trifluorotoluene(PID)				100.7	55-122					WG542556
Benzene	mg/l	0.0452	0.0439	90.5	35-147	3.10	20	L522682-01		WG542615
Ethylbenzene	mg/l	0.0481	0.0465	96.3	39-141	3.46	20	L522682-01		WG542615
Toluene	mg/l	0.0470	0.0456	94.1	35-148	3.21	20	L522682-01		WG542615
Total Xylene	mg/l	0.147	0.142	98.1	33-151	3.26	20	L522682-01		WG542615
a,a,a-Trifluorotoluene(PID)				104.9	55-122					WG542615
Benzene	mg/l	0.0448	0.0414	85.2	35-147	7.84	20	L522728-11		WG542617
Ethylbenzene	mg/l	0.0416	0.0385	83.3	39-141	7.80	20	L522728-11		WG542617
Toluene	mg/l	0.0422	0.0389	84.4	35-148	8.03	20	L522728-11		WG542617
Total Xylene	mg/l	0.128	0.118	85.1	33-151	8.06	20	L522728-11		WG542617
a,a,a-Trifluorotoluene(PID)				100.4	55-122					WG542617
Benzene	mg/l	0.0471	0.0466	94.2	35-147	1.05	20	L522625-07		WG543110
Ethylbenzene	mg/l	0.0486	0.0487	97.3	39-141	0.210	20	L522625-07		WG543110
Toluene	mg/l	0.0466	0.0467	93.2	35-148	0.200	20	L522625-07		WG543110
Total Xylene	mg/l	0.142	0.144	94.7	33-151	1.04	20	L522625-07		WG543110
a,a,a-Trifluorotoluene(PID)				99.72	55-122					WG543110

Batch number /Run number / Sample number cross reference

WG542556: R1741491: L522728-01 02 03 04 05 06 07 08 09
WG542615: R1741869: L522728-10
WG542617: R1742913: L522728-11 12 13 14 15 16 17 18
WG543110: R1745209: L522728-19

* * Calculations are performed prior to rounding of reported values.
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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
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Grand Junction, CO 81505

Report Summary

Sunday July 24, 2011

Report Number: L526993

Samples Received: 07/20/11

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
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826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 07/19/11 11:05

ESC Sample # : L526993-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 07/19/11 11:15

ESC Sample # : L526993-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.24	0.0050	mg/l	8021B	07/22/11	10
Toluene	0.34	0.050	mg/l	8021B	07/22/11	10
Ethylbenzene	0.043	0.0050	mg/l	8021B	07/22/11	10
Total Xylene	0.68	0.015	mg/l	8021B	07/22/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.4		% Rec.	8021B	07/22/11	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1A

Collected By : J. Sutrina
Collection Date : 07/19/11 11:25

ESC Sample # : L526993-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00056	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.0018	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	07/22/11	1

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Det. Limit - Practical Quantitation Limit(PQL)

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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : J. Sutrina
Collection Date : 07/19/11 11:35

ESC Sample # : L526993-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.011	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	0.0076	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.070	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P3

Collected By : J. Sutrina
Collection Date : 07/19/11 11:45

ESC Sample # : L526993-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0049	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	0.0036	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.029	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.1		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 07/19/11 11:50

ESC Sample # : L526993-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.047	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	0.011	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.13	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.1		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 07/19/11 12:00

ESC Sample # : L526993-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0092	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.0048	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 07/19/11 12:10

ESC Sample # : L526993-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0055	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : J. Sutrina
Collection Date : 07/19/11 12:20

ESC Sample # : L526993-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 07/19/11 12:30

ESC Sample # : L526993-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0010	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.2		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 07/19/11 12:40

ESC Sample # : L526993-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0034	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.0024	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 07/19/11 12:50

ESC Sample # : L526993-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.24	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	0.045	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.0097	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.6		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 07/19/11 13:10

ESC Sample # : L526993-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0010	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 07/19/11 13:15

ESC Sample # : L526993-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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826 21 1/2 Road
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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : J. Sutrina
Collection Date : 07/19/11 13:20

ESC Sample # : L526993-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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826 21 1/2 Road
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July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : J. Sutrina
Collection Date : 07/19/11 13:30

ESC Sample # : L526993-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S6

Collected By : J. Sutrina
Collection Date : 07/19/11 13:40

ESC Sample # : L526993-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.094	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	0.0040	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	0.020	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.6		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S4

Collected By : J. Sutrina
Collection Date : 07/19/11 13:45

ESC Sample # : L526993-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0026	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 07/19/11 13:50

ESC Sample # : L526993-19

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

July 24, 2011

Date Received : July 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S1

Collected By : J. Sutrina
Collection Date : 07/19/11 13:55

ESC Sample # : L526993-20

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Toluene	BDL	0.0050	mg/l	8021B	07/22/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/22/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/22/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	99.3		% Rec.	8021B	07/22/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Summary of Remarks For Samples Printed
07/24/11 at 16:24:40

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L526993-01 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-02 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-03 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-04 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-05 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-06 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-07 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-08 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-09 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-10 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-11 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-12 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-13 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-14 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-15 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-16 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-17 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-18 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-19 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24
Sample: L526993-20 Account: CORCOMGCO Received: 07/20/11 09:00 Due Date: 07/27/11 00:00 RPT Date: 07/24/11 16:24



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Olsson Associates - GJ, CO
Ken Kreie
826 21 1/2 Road

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Quality Assurance Report
Level II

L526993

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July 24, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG546627	07/22/11 09:24
Ethylbenzene	< .0005	mg/l			WG546627	07/22/11 09:24
Toluene	< .005	mg/l			WG546627	07/22/11 09:24
Total Xylene	< .0015	mg/l			WG546627	07/22/11 09:24
a,a,a-Trifluorotoluene(PID)		% Rec.	101.8	55-122	WG546627	07/22/11 09:24

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0523	105.	79-114	WG546627
Ethylbenzene	mg/l	.05	0.0506	101.	80-116	WG546627
Toluene	mg/l	.05	0.0516	103.	79-112	WG546627
Total Xylene	mg/l	.15	0.151	101.	84-118	WG546627
a,a,a-Trifluorotoluene(PID)				99.91	55-122	WG546627

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0511	0.0523	102.	79-114	2.32	20	WG546627
Ethylbenzene	mg/l	0.0493	0.0506	98.0	80-116	2.67	20	WG546627
Toluene	mg/l	0.0501	0.0516	100.	79-112	3.09	20	WG546627
Total Xylene	mg/l	0.147	0.151	98.0	84-118	2.70	20	WG546627
a,a,a-Trifluorotoluene(PID)				100.4	55-122			WG546627

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0530	0	.05	106.	35-147	L526993-01	WG546627
Ethylbenzene	mg/l	0.0507	0	.05	101.	39-141	L526993-01	WG546627
Toluene	mg/l	0.0516	0	.05	103.	35-148	L526993-01	WG546627
Total Xylene	mg/l	0.151	0	.15	101.	33-151	L526993-01	WG546627
a,a,a-Trifluorotoluene(PID)					99.39	55-122		WG546627

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0520	0.0530	104.	35-147	1.92	20	L526993-01	WG546627
Ethylbenzene	mg/l	0.0499	0.0507	99.8	39-141	1.50	20	L526993-01	WG546627
Toluene	mg/l	0.0506	0.0516	101.	35-148	1.97	20	L526993-01	WG546627
Total Xylene	mg/l	0.149	0.151	99.4	33-151	1.31	20	L526993-01	WG546627
a,a,a-Trifluorotoluene(PID)				99.66	55-122				WG546627

Batch number /Run number / Sample number cross reference

WG546627: R1779430: L526993-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Ken Kreie
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Grand Junction, CO 81505

Quality Assurance Report
Level II

L526993

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July 24, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
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826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Tuesday August 23, 2011

Report Number: L531503

Samples Received: 08/17/11

Client Project: 010-1708

Description: Oxy Y T Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 08/16/11 11:35

ESC Sample # : L531503-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.16	0.0050	mg/l	8021B	08/18/11	10
Toluene	BDL	0.050	mg/l	8021B	08/18/11	10
Ethylbenzene	0.0082	0.0050	mg/l	8021B	08/18/11	10
Total Xylene	2.0	0.015	mg/l	8021B	08/18/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.9		% Rec.	8021B	08/18/11	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 08/16/11 11:45

ESC Sample # : L531503-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P1A

Collected By : J. Sutrina
Collection Date : 08/16/11 11:55

ESC Sample # : L531503-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P2

Collected By : J. Sutrina
Collection Date : 08/16/11 12:05

ESC Sample # : L531503-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	0.00075	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	0.0058	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P3

Collected By : J. Sutrina
Collection Date : 08/16/11 12:15

ESC Sample # : L531503-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0021	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	0.010	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	0.088	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 08/16/11 12:25

ESC Sample # : L531503-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.014	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	0.018	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	0.23	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 08/16/11 12:35

ESC Sample # : L531503-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.042	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	0.026	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	0.21	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
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Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 08/16/11 12:45

ESC Sample # : L531503-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0060	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P7

Collected By : J. Sutrina
Collection Date : 08/16/11 12:55

ESC Sample # : L531503-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0047	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
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August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 08/16/11 13:05

ESC Sample # : L531503-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0046	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
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August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 08/16/11 13:15

ESC Sample # : L531503-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0028	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	0.0016	0.0015	mg/l	8021B	08/18/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Ken Kreie
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Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 08/16/11 13:25

ESC Sample # : L531503-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.039	0.00050	mg/l	8021B	08/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/19/11	1
Ethylbenzene	0.020	0.00050	mg/l	8021B	08/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.7		% Rec.	8021B	08/19/11	1

BDL - Below Detection Limit

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Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : OXY-DG

Collected By : J. Sutrina
Collection Date : 08/16/11 10:55

ESC Sample # : L531503-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 08/16/11 13:50

ESC Sample # : L531503-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 08/16/11 14:00

ESC Sample # : L531503-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : S9

Collected By : J. Sutrina
Collection Date : 08/16/11 14:10

ESC Sample # : L531503-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : S7

Collected By : J. Sutrina
Collection Date : 08/16/11 14:20

ESC Sample # : L531503-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	111.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : S6

Collected By : J. Sutrina
Collection Date : 08/16/11 14:30

ESC Sample # : L531503-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0035	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	0.0021	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : S5

Collected By : J. Sutrina
Collection Date : 08/16/11 14:40

ESC Sample # : L531503-19

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	1.2	0.0050	mg/l	8021B	08/20/11	10
Toluene	BDL	0.050	mg/l	8021B	08/20/11	10
Ethylbenzene	0.36	0.0050	mg/l	8021B	08/20/11	10
Total Xylene	0.55	0.15	mg/l	8021B	08/22/11	100
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.4		% Rec.	8021B	08/20/11	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : S4

Collected By : J. Sutrina
Collection Date : 08/16/11 14:50

ESC Sample # : L531503-20

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00086	0.00050	mg/l	8021B	08/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/22/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.5		% Rec.	8021B	08/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
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August 23, 2011

Date Received : August 17, 2011
Description : Oxy Y T Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 08/16/11 15:00

ESC Sample # : L531503-21

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Toluene	BDL	0.0050	mg/l	8021B	08/18/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/18/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	119.		% Rec.	8021B	08/18/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Summary of Remarks For Samples Printed
08/23/11 at 11:40:47

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L531503-01 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-02 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-03 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-04 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-05 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-06 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-07 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-08 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-09 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-10 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-11 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-12 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-13 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-14 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-15 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-16 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-17 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-18 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-19 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-20 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14
Sample: L531503-21 Account: CORCOMGCO Received: 08/17/11 09:00 Due Date: 08/24/11 00:00 RPT Date: 08/23/11 10:14



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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG550990	08/18/11 07:38
Ethylbenzene	< .0005	mg/l			WG550990	08/18/11 07:38
Toluene	< .005	mg/l			WG550990	08/18/11 07:38
Total Xylene	< .0015	mg/l			WG550990	08/18/11 07:38
a,a,a-Trifluorotoluene(PID)		% Rec.	102.9	55-122	WG550990	08/18/11 07:38
Benzene	< .0005	mg/l			WG551044	08/18/11 05:28
Ethylbenzene	< .0005	mg/l			WG551044	08/18/11 05:28
Toluene	< .005	mg/l			WG551044	08/18/11 05:28
a,a,a-Trifluorotoluene(PID)		% Rec.	110.4	55-122	WG551044	08/18/11 05:28
Benzene	< .0005	mg/l			WG551155	08/18/11 17:11
Ethylbenzene	< .0005	mg/l			WG551155	08/18/11 17:11
Toluene	< .005	mg/l			WG551155	08/18/11 17:11
Total Xylene	< .0015	mg/l			WG551155	08/18/11 17:11
a,a,a-Trifluorotoluene(PID)		% Rec.	100.6	55-122	WG551155	08/18/11 17:11
Benzene	< .0005	mg/l			WG551380	08/19/11 18:28
Ethylbenzene	< .0005	mg/l			WG551380	08/19/11 18:28
Toluene	< .005	mg/l			WG551380	08/19/11 18:28
Total Xylene	< .0015	mg/l			WG551380	08/19/11 18:28
a,a,a-Trifluorotoluene(PID)		% Rec.	96.35	55-122	WG551380	08/19/11 18:28
Total Xylene	< .0015	mg/l			WG551654	08/22/11 15:59
a,a,a-Trifluorotoluene(PID)		% Rec.	101.0	55-122	WG551654	08/22/11 15:59

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0506	101.	79-114	WG550990
Ethylbenzene	mg/l	.05	0.0527	105.	80-116	WG550990
Toluene	mg/l	.05	0.0539	108.	79-112	WG550990
Total Xylene	mg/l	.15	0.156	104.	84-118	WG550990
a,a,a-Trifluorotoluene(PID)				102.6	55-122	WG550990
Benzene	mg/l	.05	0.0539	108.	79-114	WG551044
Ethylbenzene	mg/l	.05	0.0580	116.	80-116	WG551044
Toluene	mg/l	.05	0.0546	109.	79-112	WG551044
a,a,a-Trifluorotoluene(PID)				108.5	55-122	WG551044
Benzene	mg/l	.05	0.0504	101.	79-114	WG551155
Ethylbenzene	mg/l	.05	0.0574	115.	80-116	WG551155
Toluene	mg/l	.05	0.0550	110.	79-112	WG551155
Total Xylene	mg/l	.15	0.169	113.	84-118	WG551155
a,a,a-Trifluorotoluene(PID)				102.4	55-122	WG551155
Benzene	mg/l	.05	0.0528	106.	79-114	WG551380
Ethylbenzene	mg/l	.05	0.0576	115.	80-116	WG551380
Toluene	mg/l	.05	0.0558	112.	79-112	WG551380
Total Xylene	mg/l	.15	0.170	113.	84-118	WG551380
a,a,a-Trifluorotoluene(PID)				101.3	55-122	WG551380

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Total Xylene	mg/l	.15	0.155	104.	84-118	WG551654
a,a,a-Trifluorotoluene(PID)				98.93	55-122	WG551654

Analyte	Units	Laboratory Control Result	Ref	Sample Duplicate %Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0522	0.0506	104.	79-114	3.08	20	WG550990
Ethylbenzene	mg/l	0.0552	0.0527	110.	80-116	4.54	20	WG550990
Toluene	mg/l	0.0550	0.0539	110.	79-112	2.14	20	WG550990
Total Xylene	mg/l	0.164	0.156	109.	84-118	4.42	20	WG550990
a,a,a-Trifluorotoluene(PID)				103.9	55-122			WG550990
Benzene	mg/l	0.0533	0.0539	106.	79-114	1.16	20	WG551044
Ethylbenzene	mg/l	0.0580	0.0580	116.	80-116	0.0400	20	WG551044
Toluene	mg/l	0.0536	0.0546	107.	79-112	1.74	20	WG551044
a,a,a-Trifluorotoluene(PID)				110.3	55-122			WG551044
Benzene	mg/l	0.0486	0.0504	97.0	79-114	3.67	20	WG551155
Ethylbenzene	mg/l	0.0554	0.0574	111.	80-116	3.60	20	WG551155
Toluene	mg/l	0.0529	0.0550	106.	79-112	3.87	20	WG551155
Total Xylene	mg/l	0.164	0.169	109.	84-118	3.59	20	WG551155
a,a,a-Trifluorotoluene(PID)				99.49	55-122			WG551155
Benzene	mg/l	0.0499	0.0528	100.	79-114	5.60	20	WG551380
Ethylbenzene	mg/l	0.0544	0.0576	109.	80-116	5.85	20	WG551380
Toluene	mg/l	0.0526	0.0558	105.	79-112	5.86	20	WG551380
Total Xylene	mg/l	0.160	0.170	107.	84-118	5.75	20	WG551380
a,a,a-Trifluorotoluene(PID)				99.52	55-122			WG551380
Total Xylene	mg/l	0.158	0.155	105.	84-118	1.68	20	WG551654
a,a,a-Trifluorotoluene(PID)				98.72	55-122			WG551654

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0559	0.00470	.05	102.	35-147	L531503-09	WG550990
Ethylbenzene	mg/l	0.0541	0	.05	108.	39-141	L531503-09	WG550990
Toluene	mg/l	0.0546	0	.05	109.	35-148	L531503-09	WG550990
Total Xylene	mg/l	0.159	0	.15	106.	33-151	L531503-09	WG550990
a,a,a-Trifluorotoluene(PID)					102.9	55-122		WG550990
Benzene	mg/l	0.0516	0	.05	103.	35-147	L531503-13	WG551044
Ethylbenzene	mg/l	0.0555	0	.05	111.	39-141	L531503-13	WG551044
Toluene	mg/l	0.0522	0	.05	104.	35-148	L531503-13	WG551044
a,a,a-Trifluorotoluene(PID)					109.5	55-122		WG551044
Benzene	mg/l	0.0427	0	.05	85.3	35-147	L531472-08	WG551155
Ethylbenzene	mg/l	0.0485	0	.05	97.0	39-141	L531472-08	WG551155
Toluene	mg/l	0.0463	0	.05	92.6	35-148	L531472-08	WG551155
Total Xylene	mg/l	0.141	0	.15	93.8	33-151	L531472-08	WG551155
a,a,a-Trifluorotoluene(PID)					110.5	55-122		WG551155

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Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Benzene	mg/l	0.0465	0	.05	93.1	35-147	L531876-01	WG551380
Ethylbenzene	mg/l	0.0502	0	.05	100.	39-141	L531876-01	WG551380
Toluene	mg/l	0.0494	0	.05	98.8	35-148	L531876-01	WG551380
Total Xylene	mg/l	0.152	0	.15	101.	33-151	L531876-01	WG551380
a,a,a-Trifluorotoluene(PID)					100.2	55-122		WG551380
Total Xylene	mg/l	0.167	0	.15	111.	33-151	L532204-02	WG551654
a,a,a-Trifluorotoluene(PID)					97.58	55-122		WG551654

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0524	0.0559	95.4	35-147	6.38	20	L531503-09	WG550990
Ethylbenzene	mg/l	0.0517	0.0541	103.	39-141	4.47	20	L531503-09	WG550990
Toluene	mg/l	0.0522	0.0546	104.	35-148	4.55	20	L531503-09	WG550990
Total Xylene	mg/l	0.152	0.159	101.	33-151	4.66	20	L531503-09	WG550990
a,a,a-Trifluorotoluene(PID)				103.4	55-122				WG550990
Benzene	mg/l	0.0523	0.0516	105.	35-147	1.31	20	L531503-13	WG551044
Ethylbenzene	mg/l	0.0562	0.0555	112.	39-141	1.33	20	L531503-13	WG551044
Toluene	mg/l	0.0532	0.0522	106.	35-148	1.81	20	L531503-13	WG551044
a,a,a-Trifluorotoluene(PID)				108.9	55-122				WG551044
Benzene	mg/l	0.0440	0.0427	88.1	35-147	3.15	20	L531472-08	WG551155
Ethylbenzene	mg/l	0.0503	0.0485	100.	39-141	3.65	20	L531472-08	WG551155
Toluene	mg/l	0.0479	0.0463	95.8	35-148	3.32	20	L531472-08	WG551155
Total Xylene	mg/l	0.146	0.141	97.5	33-151	3.78	20	L531472-08	WG551155
a,a,a-Trifluorotoluene(PID)				97.83	55-122				WG551155
Benzene	mg/l	0.0438	0.0465	87.6	35-147	6.01	20	L531876-01	WG551380
Ethylbenzene	mg/l	0.0472	0.0502	94.4	39-141	6.30	20	L531876-01	WG551380
Toluene	mg/l	0.0452	0.0494	90.4	35-148	8.87	20	L531876-01	WG551380
Total Xylene	mg/l	0.140	0.152	93.1	33-151	8.25	20	L531876-01	WG551380
a,a,a-Trifluorotoluene(PID)				99.01	55-122				WG551380
Total Xylene	mg/l	0.159	0.167	106.	33-151	4.79	20	L532204-02	WG551654
a,a,a-Trifluorotoluene(PID)				97.45	55-122				WG551654

Batch number /Run number / Sample number cross reference

WG550990: R1819055: L531503-02 03 04 05 06 07 08 09 10 11
WG551044: R1820510: L531503-13 14 15 16 17 18 21
WG551155: R1820990: L531503-01
WG551380: R1822770: L531503-12 13 14 15 16 17 18 19 20 21
WG551654: R1824070: L531503-19 20

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Tuesday September 27, 2011

Report Number: L537079

Samples Received: 09/20/11

Client Project: 010-1708

Description: Oxy YT Ranch, 17-5 Sampling

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : OXY DG1
Collected By : J. Sutrina
Collection Date : 09/19/11 09:15

ESC Sample # : L537079-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P15
Collected By : J. Sutrina
Collection Date : 09/19/11 09:40

ESC Sample # : L537079-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.14	0.0050	mg/l	8021B	09/21/11	10
Toluene	BDL	0.050	mg/l	8021B	09/21/11	10
Ethylbenzene	0.024	0.0050	mg/l	8021B	09/21/11	10
Total Xylene	0.51	0.015	mg/l	8021B	09/21/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	09/21/11	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P1
Collected By : J. Sutrina
Collection Date : 09/19/11 09:50

ESC Sample # : L537079-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	09/21/11	1

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826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P4
Collected By : J. Sutrina
Collection Date : 09/19/11 10:15

ESC Sample # : L537079-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	0.00057	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	0.0022	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P5
Collected By : J. Sutrina
Collection Date : 09/19/11 10:25

ESC Sample # : L537079-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00088	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	0.00089	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	0.0068	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	09/21/11	1

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September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P6
Collected By : J. Sutrina
Collection Date : 09/19/11 10:40

ESC Sample # : L537079-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00057	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	09/21/11	1

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Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P7
Collected By : J. Sutrina
Collection Date : 09/19/11 10:45

ESC Sample # : L537079-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0061	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P8
Collected By : J. Sutrina
Collection Date : 09/19/11 10:55

ESC Sample # : L537079-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0048	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P10
Collected By : J. Sutrina
Collection Date : 09/19/11 11:05

ESC Sample # : L537079-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	09/21/11	1

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : P9
Collected By : J. Sutrina
Collection Date : 09/19/11 11:15

ESC Sample # : L537079-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0011	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : DG1
Collected By : J. Sutrina
Collection Date : 09/19/11 11:45

ESC Sample # : L537079-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

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September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : S11
Collected By : J. Sutrina
Collection Date : 09/19/11 11:50

ESC Sample # : L537079-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

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September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : S9
Collected By : J. Sutrina
Collection Date : 09/19/11 12:10

ESC Sample # : L537079-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	09/21/11	1

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September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : S7
Collected By : J. Sutrina
Collection Date : 09/19/11 12:20

ESC Sample # : L537079-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	09/21/11	1

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September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : S5
Collected By : J. Sutrina
Collection Date : 09/19/11 12:25

ESC Sample # : L537079-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/26/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/26/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/26/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/26/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.5		% Rec.	8021B	09/26/11	1

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September 27, 2011

Date Received : September 20, 2011
Description : Oxy YT Ranch, 17-5 Sampling
Sample ID : S3
Collected By : J. Sutrina
Collection Date : 09/19/11 12:35

ESC Sample # : L537079-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	09/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/21/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	09/21/11	1

BDL - Below Detection Limit

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Summary of Remarks For Samples Printed
09/27/11 at 12:59:33

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L537079-01 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-02 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-03 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-04 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-05 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-06 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-07 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-08 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-09 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-10 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-11 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-12 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-13 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-14 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-15 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58
Sample: L537079-16 Account: CORCOMGCO Received: 09/20/11 09:00 Due Date: 09/27/11 00:00 RPT Date: 09/27/11 12:58



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Ken Kreie
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Quality Assurance Report
Level II

L537079

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September 27, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG556348	09/21/11 06:54
Ethylbenzene	< .0005	mg/l			WG556348	09/21/11 06:54
Toluene	< .005	mg/l			WG556348	09/21/11 06:54
Total Xylene	< .0015	mg/l			WG556348	09/21/11 06:54
a,a,a-Trifluorotoluene(PID)		% Rec.	100.8	55-122	WG556348	09/21/11 06:54
Benzene	< .0005	mg/l			WG557332	09/26/11 15:38
Ethylbenzene	< .0005	mg/l			WG557332	09/26/11 15:38
Toluene	< .005	mg/l			WG557332	09/26/11 15:38
Total Xylene	< .0015	mg/l			WG557332	09/26/11 15:38
a,a,a-Trifluorotoluene(PID)		% Rec.	97.50	55-122	WG557332	09/26/11 15:38

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0466	93.3	79-114	WG556348
Ethylbenzene	mg/l	.05	0.0512	102.	80-116	WG556348
Toluene	mg/l	.05	0.0516	103.	79-112	WG556348
Total Xylene	mg/l	.15	0.151	101.	84-118	WG556348
a,a,a-Trifluorotoluene(PID)				99.93	55-122	WG556348
Benzene	mg/l	.05	0.0472	94.4	79-114	WG557332
Ethylbenzene	mg/l	.05	0.0513	103.	80-116	WG557332
Toluene	mg/l	.05	0.0517	103.	79-112	WG557332
Total Xylene	mg/l	.15	0.150	100.	84-118	WG557332
a,a,a-Trifluorotoluene(PID)				97.08	55-122	WG557332

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0470	0.0466	94.0	79-114	0.840	20	WG556348
Ethylbenzene	mg/l	0.0526	0.0512	105.	80-116	2.68	20	WG556348
Toluene	mg/l	0.0523	0.0516	105.	79-112	1.35	20	WG556348
Total Xylene	mg/l	0.153	0.151	102.	84-118	1.19	20	WG556348
a,a,a-Trifluorotoluene(PID)				101.8	55-122			WG556348
Benzene	mg/l	0.0418	0.0472	84.0	79-114	12.1	20	WG557332
Ethylbenzene	mg/l	0.0464	0.0513	93.0	80-116	10.1	20	WG557332
Toluene	mg/l	0.0461	0.0517	92.0	79-112	11.5	20	WG557332
Total Xylene	mg/l	0.134	0.150	90.0	84-118	11.1	20	WG557332
a,a,a-Trifluorotoluene(PID)				95.74	55-122			WG557332

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/l	0.0476	0	.05	95.2	35-147	L537079-01	WG556348
Ethylbenzene	mg/l	0.0536	0	.05	107.	39-141	L537079-01	WG556348
Toluene	mg/l	0.0540	0	.05	108.	35-148	L537079-01	WG556348
Total Xylene	mg/l	0.158	0	.15	105.	33-151	L537079-01	WG556348
a,a,a-Trifluorotoluene(PID)					100.1	55-122		WG556348
Benzene	mg/l	0.0467	0	.05	93.3	35-147	L537981-04	WG557332
Ethylbenzene	mg/l	0.0519	0	.05	104.	39-141	L537981-04	WG557332
Toluene	mg/l	0.0525	0	.05	105.	35-148	L537981-04	WG557332
Total Xylene	mg/l	0.151	0	.15	100.	33-151	L537981-04	WG557332

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
a,a,a-Trifluorotoluene(PID)					96.99	55-122				
Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
Benzene	mg/l	0.0464	0.0476	92.7	35-147	2.67	20	L537079-01		WG556348
Ethylbenzene	mg/l	0.0518	0.0536	104.	39-141	3.32	20	L537079-01		WG556348
Toluene	mg/l	0.0515	0.0540	103.	35-148	4.85	20	L537079-01		WG556348
Total Xylene	mg/l	0.153	0.158	102.	33-151	3.00	20	L537079-01		WG556348
a,a,a-Trifluorotoluene(PID)				100.8	55-122					WG556348
Benzene	mg/l	0.0479	0.0467	95.8	35-147	2.59	20	L537981-04		WG557332
Ethylbenzene	mg/l	0.0525	0.0519	105.	39-141	1.31	20	L537981-04		WG557332
Toluene	mg/l	0.0533	0.0525	106.	35-148	1.45	20	L537981-04		WG557332
Total Xylene	mg/l	0.153	0.151	102.	33-151	1.80	20	L537981-04		WG557332
a,a,a-Trifluorotoluene(PID)				97.72	55-122					WG557332

Batch number /Run number / Sample number cross reference

WG556348: R1869483: L537079-01 02 03 04 05 06 07 08 09 10 11 12 13 14 16
WG557332: R1871812: L537079-15

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
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826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Friday October 21, 2011

Report Number: L542120

Samples Received: 10/18/11

Client Project: 010-1708

Description: Oxy YT Ranch 17-5 Sampling

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
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826 21 1/2 Road
Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : OXY-DG1
Collected By : J. Surina
Collection Date : 10/17/11 10:35

ESC Sample # : L542120-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	10/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : P15
Collected By : J. Surina
Collection Date : 10/17/11 11:05

ESC Sample # : L542120-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.12	0.0010	mg/l	8021B	10/19/11	2
Toluene	0.015	0.010	mg/l	8021B	10/19/11	2
Ethylbenzene	0.012	0.0010	mg/l	8021B	10/19/11	2
Total Xylene	0.38	0.0030	mg/l	8021B	10/19/11	2
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	10/19/11	2

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling

Sample ID : P1

Collected By : J. Surina
Collection Date : 10/17/11 11:10

ESC Sample # : L542120-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	10/19/11	1

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Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : P4
Collected By : J. Surina
Collection Date : 10/17/11 11:30

ESC Sample # : L542120-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	0.0064	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	10/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : P5
Collected By : J. Surina
Collection Date : 10/17/11 11:35

ESC Sample # : L542120-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	10/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling

Sample ID : P6

Collected By : J. Surina
Collection Date : 10/17/11 11:40

ESC Sample # : L542120-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0031	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	10/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : P7
Collected By : J. Surina
Collection Date : 10/17/11 11:45

ESC Sample # : L542120-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.018	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	10/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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826 21 1/2 Road
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October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : P8
Collected By : J. Surina
Collection Date : 10/17/11 11:50

ESC Sample # : L542120-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0058	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	10/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : P10
Collected By : J. Surina
Collection Date : 10/17/11 11:55

ESC Sample # : L542120-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/20/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	10/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : P9
Collected By : J. Surina
Collection Date : 10/17/11 12:00

ESC Sample # : L542120-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	10/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : DG1
Collected By : J. Surina
Collection Date : 10/17/11 13:00

ESC Sample # : L542120-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/19/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/19/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/19/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	10/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : S11
Collected By : J. Surina
Collection Date : 10/17/11 13:05

ESC Sample # : L542120-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	10/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : S6
Collected By : J. Surina
Collection Date : 10/17/11 13:15

ESC Sample # : L542120-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	10/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

October 21, 2011

Date Received : October 18, 2011
Description : Oxy YT Ranch 17-5 Sampling
Sample ID : S3
Collected By : J. Surina
Collection Date : 10/17/11 13:20

ESC Sample # : L542120-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	10/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	10/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 10/21/11 09:56 Printed: 10/21/11 09:56

Summary of Remarks For Samples Printed
10/21/11 at 09:56:44

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L542120-01 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-02 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-03 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-04 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-05 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-06 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-07 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-08 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-09 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-10 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-11 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-12 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-13 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56
Sample: L542120-14 Account: CORCOMGCO Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/21/11 09:56



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Olsson Associates - GJ, CO
Ken Kreie
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Quality Assurance Report
Level II

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October 21, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG561245	10/18/11 22:09
Ethylbenzene	< .0005	mg/l			WG561245	10/18/11 22:09
Toluene	< .005	mg/l			WG561245	10/18/11 22:09
Total Xylene	< .0015	mg/l			WG561245	10/18/11 22:09
a,a,a-Trifluorotoluene(PID)		% Rec.	96.97	55-122	WG561245	10/18/11 22:09
Benzene	< .0005	mg/l			WG561385	10/19/11 16:17
Ethylbenzene	< .0005	mg/l			WG561385	10/19/11 16:17
Toluene	< .005	mg/l			WG561385	10/19/11 16:17
Total Xylene	< .0015	mg/l			WG561385	10/19/11 16:17
a,a,a-Trifluorotoluene(PID)		% Rec.	99.75	55-122	WG561385	10/19/11 16:17
Benzene	< .0005	mg/l			WG561323	10/19/11 13:11
Ethylbenzene	< .0005	mg/l			WG561323	10/19/11 13:11
Toluene	< .005	mg/l			WG561323	10/19/11 13:11
Total Xylene	< .0015	mg/l			WG561323	10/19/11 13:11
a,a,a-Trifluorotoluene(PID)		% Rec.	104.0	55-122	WG561323	10/19/11 13:11

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0426	85.3	79-114	WG561245
Ethylbenzene	mg/l	.05	0.0488	97.6	80-116	WG561245
Toluene	mg/l	.05	0.0482	96.5	79-112	WG561245
Total Xylene	mg/l	.15	0.142	94.8	84-118	WG561245
a,a,a-Trifluorotoluene(PID)				95.44	55-122	WG561245
Benzene	mg/l	.05	0.0454	90.9	79-114	WG561385
Ethylbenzene	mg/l	.05	0.0525	105.	80-116	WG561385
Toluene	mg/l	.05	0.0514	103.	79-112	WG561385
Total Xylene	mg/l	.15	0.153	102.	84-118	WG561385
a,a,a-Trifluorotoluene(PID)				97.70	55-122	WG561385
Benzene	mg/l	.05	0.0486	97.1	79-114	WG561323
Ethylbenzene	mg/l	.05	0.0534	107.	80-116	WG561323
Toluene	mg/l	.05	0.0539	108.	79-112	WG561323
Total Xylene	mg/l	.15	0.159	106.	84-118	WG561323
a,a,a-Trifluorotoluene(PID)				103.1	55-122	WG561323

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0461	0.0426	92.0	79-114	7.79	20	WG561245
Ethylbenzene	mg/l	0.0526	0.0488	105.	80-116	7.39	20	WG561245
Toluene	mg/l	0.0517	0.0482	103.	79-112	6.88	20	WG561245
Total Xylene	mg/l	0.153	0.142	102.	84-118	7.57	20	WG561245
a,a,a-Trifluorotoluene(PID)				96.77	55-122			WG561245
Benzene	mg/l	0.0449	0.0454	90.0	79-114	1.08	20	WG561385
Ethylbenzene	mg/l	0.0525	0.0525	105.	80-116	0.0900	20	WG561385
Toluene	mg/l	0.0515	0.0514	103.	79-112	0.230	20	WG561385
Total Xylene	mg/l	0.151	0.153	101.	84-118	1.50	20	WG561385
a,a,a-Trifluorotoluene(PID)				98.04	55-122			WG561385

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Olsson Associates - GJ, CO
Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

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Level II

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Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0479	0.0486	96.0	79-114	1.35	20	WG561323
Ethylbenzene	mg/l	0.0527	0.0534	105.	80-116	1.25	20	WG561323
Toluene	mg/l	0.0530	0.0539	106.	79-112	1.64	20	WG561323
Total Xylene	mg/l	0.157	0.159	104.	84-118	1.26	20	WG561323
a,a,a-Trifluorotoluene(PID)				103.5	55-122			WG561323

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0453	0.000540	.05	89.5	35-147	L541751-04	WG561245
Ethylbenzene	mg/l	0.0521	0	.05	104.	39-141	L541751-04	WG561245
Toluene	mg/l	0.0511	0	.05	102.	35-148	L541751-04	WG561245
Total Xylene	mg/l	0.150	0	.15	100.	33-151	L541751-04	WG561245
a,a,a-Trifluorotoluene(PID)					96.59	55-122		WG561245

Benzene	mg/l	0.0475	0	.05	94.9	35-147	L541856-14	WG561385
Ethylbenzene	mg/l	0.0551	0	.05	110.	39-141	L541856-14	WG561385
Toluene	mg/l	0.0544	0	.05	109.	35-148	L541856-14	WG561385
Total Xylene	mg/l	0.160	0	.15	107.	33-151	L541856-14	WG561385
a,a,a-Trifluorotoluene(PID)					97.43	55-122		WG561385

Benzene	mg/l	0.0488	0	.05	97.5	35-147	L541856-05	WG561323
Ethylbenzene	mg/l	0.0540	0	.05	108.	39-141	L541856-05	WG561323
Toluene	mg/l	0.0543	0	.05	108.	35-148	L541856-05	WG561323
Total Xylene	mg/l	0.161	0	.15	107.	33-151	L541856-05	WG561323
a,a,a-Trifluorotoluene(PID)					103.3	55-122		WG561323

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0453	0.0453	89.6	35-147	0.110	20	L541751-04	WG561245
Ethylbenzene	mg/l	0.0522	0.0521	104.	39-141	0.260	20	L541751-04	WG561245
Toluene	mg/l	0.0511	0.0511	102.	35-148	0.0200	20	L541751-04	WG561245
Total Xylene	mg/l	0.151	0.150	101.	33-151	0.360	20	L541751-04	WG561245
a,a,a-Trifluorotoluene(PID)				95.21	55-122				WG561245

Benzene	mg/l	0.0475	0.0475	95.0	35-147	0.100	20	L541856-14	WG561385
Ethylbenzene	mg/l	0.0554	0.0551	111.	39-141	0.570	20	L541856-14	WG561385
Toluene	mg/l	0.0548	0.0544	110.	35-148	0.610	20	L541856-14	WG561385
Total Xylene	mg/l	0.161	0.160	107.	33-151	0.490	20	L541856-14	WG561385
a,a,a-Trifluorotoluene(PID)				98.99	55-122				WG561385

Benzene	mg/l	0.0491	0.0488	98.1	35-147	0.630	20	L541856-05	WG561323
Ethylbenzene	mg/l	0.0541	0.0540	108.	39-141	0.120	20	L541856-05	WG561323
Toluene	mg/l	0.0543	0.0543	109.	35-148	0.0800	20	L541856-05	WG561323
Total Xylene	mg/l	0.161	0.161	108.	33-151	0.470	20	L541856-05	WG561323
a,a,a-Trifluorotoluene(PID)				103.2	55-122				WG561323

Batch number /Run number / Sample number cross reference

WG561245: R1901288: L542120-01

WG561385: R1902673: L542120-11 12 13 14

WG561323: R1903058: L542120-02 03 04 05 06 07 08 09 10

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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October 21, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
Olsson Associates- Grand Junction, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Friday December 02, 2011

Report Number: L548917

Samples Received: 11/30/11

Client Project: 010-1708

Description: OXY YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jayred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : OXY-DG1

Collected By : Jessica Sutrina
Collection Date : 11/28/11 12:10

ESC Sample # : L548917-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Toluene	BDL	0.0050	mg/l	8021B	11/30/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	11/30/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.3		% Rec.	8021B	11/30/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P1

Collected By : Jessica Sutrina
Collection Date : 11/28/11 13:10

ESC Sample # : L548917-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Toluene	BDL	0.0050	mg/l	8021B	11/30/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	11/30/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.2		% Rec.	8021B	11/30/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P4

Collected By : Jessica Sutrina
Collection Date : 11/28/11 13:45

ESC Sample # : L548917-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Toluene	BDL	0.0050	mg/l	8021B	11/30/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	11/30/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	98.1		% Rec.	8021B	11/30/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P5

Collected By : Jessica Sutrina
Collection Date : 11/28/11 13:55

ESC Sample # : L548917-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Toluene	BDL	0.0050	mg/l	8021B	11/30/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	11/30/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.9		% Rec.	8021B	11/30/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P6

Collected By : Jessica Sutrina
Collection Date : 11/28/11 14:05

ESC Sample # : L548917-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00051	0.00050	mg/l	8021B	11/30/11	1
Toluene	BDL	0.0050	mg/l	8021B	11/30/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	11/30/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	11/30/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.0		% Rec.	8021B	11/30/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Ken Kreie
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826 21 1/2 Road
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December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P8

Collected By : Jessica Sutrina
Collection Date : 11/28/11 14:15

ESC Sample # : L548917-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0092	0.00050	mg/l	8021B	12/01/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/01/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	98.7		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
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December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P10

Collected By : Jessica Sutrina
Collection Date : 11/28/11 14:25

ESC Sample # : L548917-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/01/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	98.4		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Ken Kreie
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826 21 1/2 Road
Grand Junction, CO 81505

December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P9

Collected By : Jessica Sutrina
Collection Date : 11/28/11 14:35

ESC Sample # : L548917-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.034	0.00050	mg/l	8021B	12/01/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	0.012	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/01/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.4		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : P15

Collected By : Jessica Sutrina
Collection Date : 11/28/11 14:50

ESC Sample # : L548917-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.21	0.00050	mg/l	8021B	12/01/11	1
Toluene	0.042	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	0.0023	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	1.3	0.015	mg/l	8021B	12/02/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.9		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : DG1

Collected By : Jessica Sutrina
Collection Date : 11/28/11 15:15

ESC Sample # : L548917-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/02/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.9		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
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December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : S11

Collected By : Jessica Sutrina
Collection Date : 11/28/11 15:25

ESC Sample # : L548917-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/02/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.4		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : S7

Collected By : Jessica Sutrina
Collection Date : 11/28/11 15:35

ESC Sample # : L548917-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/01/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.9		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

December 02, 2011

Date Received : November 30, 2011
Description : OXY YT Ranch 17-5

Sample ID : S3

Collected By : Jessica Sutrina
Collection Date : 11/28/11 15:40

ESC Sample # : L548917-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/01/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/01/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/01/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.3		% Rec.	8021B	12/01/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

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Level II

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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG567873	11/30/11 18:33
Ethylbenzene	< .0005	mg/l			WG567873	11/30/11 18:33
Toluene	< .005	mg/l			WG567873	11/30/11 18:33
Total Xylene	< .0015	mg/l			WG567873	11/30/11 18:33
a,a,a-Trifluorotoluene(PID)		% Rec.	99.33	55-122	WG567873	11/30/11 18:33
Total Xylene	< .0015	mg/l			WG568129	12/02/11 00:53
a,a,a-Trifluorotoluene(PID)		% Rec.	101.0	55-122	WG568129	12/02/11 00:53

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0508	102.	79-114	WG567873
Ethylbenzene	mg/l	.05	0.0555	111.	80-116	WG567873
Toluene	mg/l	.05	0.0526	105.	79-112	WG567873
Total Xylene	mg/l	.15	0.163	109.	84-118	WG567873
a,a,a-Trifluorotoluene(PID)				104.6	55-122	WG567873
Total Xylene	mg/l	.15	0.139	92.7	84-118	WG568129
a,a,a-Trifluorotoluene(PID)				99.83	55-122	WG568129

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0499	0.0508	100.	79-114	1.88	20	WG567873
Ethylbenzene	mg/l	0.0539	0.0555	108.	80-116	2.90	20	WG567873
Toluene	mg/l	0.0513	0.0526	103.	79-112	2.57	20	WG567873
Total Xylene	mg/l	0.158	0.163	105.	84-118	3.13	20	WG567873
a,a,a-Trifluorotoluene(PID)				99.13	55-122			WG567873
Total Xylene	mg/l	0.148	0.139	99.0	84-118	6.24	20	WG568129
a,a,a-Trifluorotoluene(PID)				100.1	55-122			WG568129

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/l	0.0488	0	.05	97.7	35-147	L548910-01	WG567873
Ethylbenzene	mg/l	0.0521	0	.05	104.	39-141	L548910-01	WG567873
Toluene	mg/l	0.0501	0	.05	100.	35-148	L548910-01	WG567873
Total Xylene	mg/l	0.153	0	.15	102.	33-151	L548910-01	WG567873
a,a,a-Trifluorotoluene(PID)					98.02	55-122		WG567873
Total Xylene	mg/l	0.150	0	.15	99.9	33-151	L549023-04	WG568129
a,a,a-Trifluorotoluene(PID)					98.25	55-122		WG568129

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0480	0.0488	95.9	35-147	1.85	20	L548910-01	WG567873
Ethylbenzene	mg/l	0.0509	0.0521	102.	39-141	2.36	20	L548910-01	WG567873
Toluene	mg/l	0.0490	0.0501	97.9	35-148	2.35	20	L548910-01	WG567873
Total Xylene	mg/l	0.149	0.153	99.2	33-151	2.45	20	L548910-01	WG567873
a,a,a-Trifluorotoluene(PID)				97.45	55-122				WG567873

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Ken Kreie
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Grand Junction, CO 81505

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Level II

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December 02, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Total Xylene	mg/l	0.147	0.150	98.0	33-151	1.91	20	L549023-04	WG568129
a,a,a-Trifluorotoluene(PID)				99.94	55-122				WG568129

Batch number /Run number / Sample number cross reference

WG567873: R1951252: L548917-01 02 03 04 05 06 07 08 09 10 11 12 13
WG568129: R1952792: L548917-09 10 11

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
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Report Summary

Wednesday December 28, 2011

Report Number: L552589

Samples Received: 12/20/11

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : OXY-DG1

Collected By : J. Sutrina
Collection Date : 12/19/11 11:20

ESC Sample # : L552589-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/20/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/20/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/20/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/20/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	92.7		% Rec.	8021B	12/20/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 12/19/11 11:50

ESC Sample # : L552589-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.26	0.0025	mg/l	8021B	12/21/11	5
Toluene	BDL	0.025	mg/l	8021B	12/21/11	5
Ethylbenzene	0.0029	0.0025	mg/l	8021B	12/21/11	5
Total Xylene	1.1	0.0075	mg/l	8021B	12/21/11	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	91.2		% Rec.	8021B	12/21/11	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 12/19/11 12:10

ESC Sample # : L552589-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	92.8		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 12/19/11 12:30

ESC Sample # : L552589-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	92.3		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 12/19/11 12:40

ESC Sample # : L552589-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.0		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 12/19/11 12:55

ESC Sample # : L552589-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	93.9		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : J. Sutrina
Collection Date : 12/19/11 13:10

ESC Sample # : L552589-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.6		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 12/19/11 13:20

ESC Sample # : L552589-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0067	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.6		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 12/19/11 13:30

ESC Sample # : L552589-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.6		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 12/19/11 13:45

ESC Sample # : L552589-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.017	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	0.0055	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	0.086	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	92.3		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 12/19/11 14:00

ESC Sample # : L552589-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.0		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 12/19/11 14:10

ESC Sample # : L552589-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	93.8		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : J. Sutrina
Collection Date : 12/19/11 14:20

ESC Sample # : L552589-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.4		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

December 28, 2011

Date Received : December 20, 2011
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 12/19/11 14:30

ESC Sample # : L552589-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Toluene	BDL	0.0050	mg/l	8021B	12/21/11	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/21/11	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/21/11	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	92.6		% Rec.	8021B	12/21/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Reported: 12/28/11 15:10 Printed: 12/28/11 15:11

Summary of Remarks For Samples Printed
12/28/11 at 15:11:02

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L552589-01 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-02 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-03 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-04 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-05 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-06 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-07 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-08 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-09 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-10 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-11 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-12 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-13 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10
Sample: L552589-14 Account: CORCOMGCO Received: 12/20/11 09:00 Due Date: 12/28/11 00:00 RPT Date: 12/28/11 15:10



YOUR LAB OF CHOICE

Olsson Associates - GJ, CO
Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L552589

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

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Est. 1970

December 28, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG571030	12/20/11 22:06
Ethylbenzene	< .0005	mg/l			WG571030	12/20/11 22:06
Toluene	< .005	mg/l			WG571030	12/20/11 22:06
Total Xylene	< .0015	mg/l			WG571030	12/20/11 22:06
a,a,a-Trifluorotoluene(PID)		% Rec.	92.41	55-122	WG571030	12/20/11 22:06

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0460	92.0	79-114	WG571030
Ethylbenzene	mg/l	.05	0.0482	96.5	80-116	WG571030
Toluene	mg/l	.05	0.0462	92.4	79-112	WG571030
Total Xylene	mg/l	.15	0.143	95.3	84-118	WG571030
a,a,a-Trifluorotoluene(PID)				90.97	55-122	WG571030

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0459	0.0460	92.0	79-114	0.140	20	WG571030
Ethylbenzene	mg/l	0.0485	0.0482	97.0	80-116	0.450	20	WG571030
Toluene	mg/l	0.0467	0.0462	93.0	79-112	0.960	20	WG571030
Total Xylene	mg/l	0.143	0.143	95.0	84-118	0.200	20	WG571030
a,a,a-Trifluorotoluene(PID)				91.40	55-122			WG571030

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0473	0	.05	94.6	35-147	L552589-01	WG571030
Ethylbenzene	mg/l	0.0502	0	.05	100.	39-141	L552589-01	WG571030
Toluene	mg/l	0.0482	0	.05	96.3	35-148	L552589-01	WG571030
Total Xylene	mg/l	0.149	0	.15	99.1	33-151	L552589-01	WG571030
a,a,a-Trifluorotoluene(PID)					91.10	55-122		WG571030

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0435	0.0473	87.1	35-147	8.30	20	L552589-01	WG571030
Ethylbenzene	mg/l	0.0460	0.0502	92.1	39-141	8.72	20	L552589-01	WG571030
Toluene	mg/l	0.0441	0.0482	88.2	35-148	8.88	20	L552589-01	WG571030
Total Xylene	mg/l	0.136	0.149	90.9	33-151	8.59	20	L552589-01	WG571030
a,a,a-Trifluorotoluene(PID)				90.58	55-122				WG571030

Batch number /Run number / Sample number cross reference

WG571030: R1975094: L552589-01 02 03 04 05 06 07 08 09 10 11 12 13 14

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Ken Kreie
826 21 1/2 Road

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Quality Assurance Report
Level II

L552589

12065 Lebanon Rd.
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December 28, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Ken Kreie
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826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Monday January 23, 2012

Report Number: L556332

Samples Received: 01/18/12

Client Project: 010-1708

Description: OXY YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Ken Kreie
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : OXY-DG1

Collected By : Jessica Sutrina
Collection Date : 01/17/12 10:30

ESC Sample # : L556332-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	95.7		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Ken Kreie
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January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P15

Collected By : Jessica Sutrina
Collection Date : 01/17/12 11:00

ESC Sample # : L556332-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.22	0.0025	mg/l	8021B	01/19/12	5
Toluene	BDL	0.025	mg/l	8021B	01/19/12	5
Ethylbenzene	BDL	0.0025	mg/l	8021B	01/19/12	5
Total Xylene	0.97	0.0075	mg/l	8021B	01/19/12	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	94.1		% Rec.	8021B	01/19/12	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P1

Collected By : Jessica Sutrina
Collection Date : 01/17/12 11:20

ESC Sample # : L556332-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	94.7		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P4

Collected By : Jessica Sutrina
Collection Date : 01/17/12 11:40

ESC Sample # : L556332-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	94.3		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

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REPORT OF ANALYSIS

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January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P5

Collected By : Jessica Sutrina
Collection Date : 01/17/12 11:50

ESC Sample # : L556332-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	95.1		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P6

Collected By : Jessica Sutrina
Collection Date : 01/17/12 12:00

ESC Sample # : L556332-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	94.5		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P7

Collected By : Jessica Sutrina
Collection Date : 01/17/12 12:10

ESC Sample # : L556332-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	95.1		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P8

Collected By : Jessica Sutrina
Collection Date : 01/17/12 12:20

ESC Sample # : L556332-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	95.1		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Ken Kreie
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January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P10

Collected By : Jessica Sutrina
Collection Date : 01/17/12 12:35

ESC Sample # : L556332-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	94.8		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : P9

Collected By : Jessica Sutrina
Collection Date : 01/17/12 12:45

ESC Sample # : L556332-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	95.0		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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826 21 1/2 Road
Grand Junction, CO 81505

January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : DG1

Collected By : Jessica Sutrina
Collection Date : 01/17/12 13:10

ESC Sample # : L556332-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0012	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.5		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : S11

Collected By : Jessica Sutrina
Collection Date : 01/17/12 13:15

ESC Sample # : L556332-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	94.5		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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826 21 1/2 Road
Grand Junction, CO 81505

January 23, 2012

Date Received : January 18, 2012
Description : OXY YT Ranch 17-5

Sample ID : S3

Collected By : Jessica Sutrina
Collection Date : 01/17/12 13:30

ESC Sample # : L556332-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	01/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	01/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	01/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.7		% Rec.	8021B	01/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 01/23/12 14:49 Printed: 01/23/12 14:50

Summary of Remarks For Samples Printed
01/23/12 at 14:50:08

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L556332-01 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-02 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-03 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-04 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-05 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-06 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-07 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-08 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-09 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-10 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-11 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-12 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49
Sample: L556332-13 Account: CORCOMGCO Received: 01/18/12 09:00 Due Date: 01/25/12 00:00 RPT Date: 01/23/12 14:49



YOUR LAB OF CHOICE

Olsson Associates - GJ, CO
Ken Kreie
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L556332

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January 23, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG574724	01/19/12 00:32
Ethylbenzene	< .0005	mg/l			WG574724	01/19/12 00:32
Toluene	< .005	mg/l			WG574724	01/19/12 00:32
Total Xylene	< .0015	mg/l			WG574724	01/19/12 00:32
a,a,a-Trifluorotoluene(PID)		% Rec.	97.51	55-122	WG574724	01/19/12 00:32
Benzene	< .0005	mg/l			WG574859	01/19/12 18:16
Ethylbenzene	< .0005	mg/l			WG574859	01/19/12 18:16
Toluene	< .005	mg/l			WG574859	01/19/12 18:16
Total Xylene	< .0015	mg/l			WG574859	01/19/12 18:16
a,a,a-Trifluorotoluene(PID)		% Rec.	97.03	55-122	WG574859	01/19/12 18:16
Benzene	< .0005	mg/l			WG574830	01/19/12 15:04
Ethylbenzene	< .0005	mg/l			WG574830	01/19/12 15:04
Toluene	< .005	mg/l			WG574830	01/19/12 15:04
Total Xylene	< .0015	mg/l			WG574830	01/19/12 15:04
a,a,a-Trifluorotoluene(PID)		% Rec.	95.43	55-122	WG574830	01/19/12 15:04

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0481	96.2	79-114	WG574724
Ethylbenzene	mg/l	.05	0.0504	101.	80-116	WG574724
Toluene	mg/l	.05	0.0506	101.	79-112	WG574724
Total Xylene	mg/l	.15	0.146	97.0	84-118	WG574724
a,a,a-Trifluorotoluene(PID)				94.76	55-122	WG574724
Benzene	mg/l	.05	0.0501	100.	79-114	WG574859
Ethylbenzene	mg/l	.05	0.0528	106.	80-116	WG574859
Toluene	mg/l	.05	0.0529	106.	79-112	WG574859
Total Xylene	mg/l	.15	0.152	102.	84-118	WG574859
a,a,a-Trifluorotoluene(PID)				95.55	55-122	WG574859
Benzene	mg/l	.05	0.0449	89.8	79-114	WG574830
Ethylbenzene	mg/l	.05	0.0461	92.2	80-116	WG574830
Toluene	mg/l	.05	0.0491	98.3	79-112	WG574830
Total Xylene	mg/l	.15	0.133	88.5	84-118	WG574830
a,a,a-Trifluorotoluene(PID)				93.90	55-122	WG574830

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0478	0.0481	96.0	79-114	0.490	20	WG574724
Ethylbenzene	mg/l	0.0502	0.0504	100.	80-116	0.290	20	WG574724
Toluene	mg/l	0.0504	0.0506	101.	79-112	0.370	20	WG574724
Total Xylene	mg/l	0.144	0.146	96.0	84-118	0.780	20	WG574724
a,a,a-Trifluorotoluene(PID)				95.93	55-122			WG574724
Benzene	mg/l	0.0474	0.0501	95.0	79-114	5.41	20	WG574859
Ethylbenzene	mg/l	0.0502	0.0528	100.	80-116	4.97	20	WG574859
Toluene	mg/l	0.0503	0.0529	101.	79-112	4.95	20	WG574859
Total Xylene	mg/l	0.145	0.152	97.0	84-118	4.92	20	WG574859
a,a,a-Trifluorotoluene(PID)				95.85	55-122			WG574859

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Olsson Associates - GJ, CO
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Quality Assurance Report
Level II

L556332

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Tax I.D. 62-0814289

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January 23, 2012

Analyte	Units	Laboratory Control			Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec						
Benzene	mg/l	0.0454	0.0449	91.0			79-114	0.980	20	WG574830
Ethylbenzene	mg/l	0.0462	0.0461	92.0			80-116	0.120	20	WG574830
Toluene	mg/l	0.0499	0.0491	100.			79-112	1.60	20	WG574830
Total Xylene	mg/l	0.132	0.133	88.0			84-118	0.200	20	WG574830
a,a,a-Trifluorotoluene(PID)				93.96			55-122			WG574830

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Benzene	mg/l	0.0515	0.00120	.05	101.	35-147	L556332-11	WG574724
Ethylbenzene	mg/l	0.0537	0	.05	107.	39-141	L556332-11	WG574724
Toluene	mg/l	0.0540	0	.05	108.	35-148	L556332-11	WG574724
Total Xylene	mg/l	0.155	0	.15	103.	33-151	L556332-11	WG574724
a,a,a-Trifluorotoluene(PID)					95.42	55-122		WG574724

Benzene	mg/l	0.0535	0.00200	.05	103.	35-147	L555965-01	WG574859
Ethylbenzene	mg/l	0.0930	0.0390	.05	108.	39-141	L555965-01	WG574859
Toluene	mg/l	0.0537	0	.05	107.	35-148	L555965-01	WG574859
Total Xylene	mg/l	0.157	0.00360	.15	102.	33-151	L555965-01	WG574859
a,a,a-Trifluorotoluene(PID)					96.65	55-122		WG574859

Benzene	mg/l	0.0756	0.0290	.05	93.2	35-147	L556206-01	WG574830
Ethylbenzene	mg/l	0.0498	0.00370	.05	92.2	39-141	L556206-01	WG574830
Toluene	mg/l	0.0515	0	.05	103.	35-148	L556206-01	WG574830
Total Xylene	mg/l	0.137	0	.15	91.2	33-151	L556206-01	WG574830
a,a,a-Trifluorotoluene(PID)					102.0	55-122		WG574830

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0467	0.0515	90.9	35-147	9.89	20	L556332-11	WG574724
Ethylbenzene	mg/l	0.0489	0.0537	97.8	39-141	9.35	20	L556332-11	WG574724
Toluene	mg/l	0.0491	0.0540	98.1	35-148	9.62	20	L556332-11	WG574724
Total Xylene	mg/l	0.141	0.155	93.9	33-151	9.49	20	L556332-11	WG574724
a,a,a-Trifluorotoluene(PID)				96.52	55-122				WG574724

Benzene	mg/l	0.0529	0.0535	102.	35-147	1.09	20	L555965-01	WG574859
Ethylbenzene	mg/l	0.0902	0.0930	102.	39-141	2.99	20	L555965-01	WG574859
Toluene	mg/l	0.0526	0.0537	105.	35-148	2.08	20	L555965-01	WG574859
Total Xylene	mg/l	0.157	0.157	102.	33-151	0.200	20	L555965-01	WG574859
a,a,a-Trifluorotoluene(PID)				96.35	55-122				WG574859

Benzene	mg/l	0.0746	0.0756	91.3	35-147	1.30	20	L556206-01	WG574830
Ethylbenzene	mg/l	0.0492	0.0498	91.1	39-141	1.10	20	L556206-01	WG574830
Toluene	mg/l	0.0507	0.0515	101.	35-148	1.70	20	L556206-01	WG574830
Total Xylene	mg/l	0.134	0.137	89.2	33-151	2.19	20	L556206-01	WG574830
a,a,a-Trifluorotoluene(PID)				101.4	55-122				WG574830

Batch number /Run number / Sample number cross reference

WG574724: R2005592: L556332-11

WG574859: R2006434: L556332-13

WG574830: R2006436: L556332-01 02 03 04 05 06 07 08 09 10 12

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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January 23, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Tuesday February 28, 2012

Report Number: L561853

Samples Received: 02/23/12

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : OXY DG1

Collected By : J. Sutrina
Collection Date : 02/21/12 10:00

ESC Sample # : L561853-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/23/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/23/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/23/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/23/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	02/23/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 02/21/12 10:25

ESC Sample # : L561853-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.24	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	0.042	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	0.90	0.015	mg/l	8021B	02/26/12	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	97.2		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Tim Dobransky
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Grand Junction, CO 81505

February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 02/21/12 10:30

ESC Sample # : L561853-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00052	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/26/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 02/21/12 11:30

ESC Sample # : L561853-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 02/21/12 11:40

ESC Sample # : L561853-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 02/21/12 11:50

ESC Sample # : L561853-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 02/21/12 12:00

ESC Sample # : L561853-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 02/21/12 12:10

ESC Sample # : L561853-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0012	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 02/21/12 12:40

ESC Sample # : L561853-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	02/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 02/21/12 12:50

ESC Sample # : L561853-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/23/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/23/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/23/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/23/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	02/23/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

February 28, 2012

Date Received : February 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 02/21/12 13:00

ESC Sample # : L561853-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/23/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/23/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/23/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/23/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	02/23/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Summary of Remarks For Samples Printed
02/28/12 at 10:23:39

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L561853-01 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-02 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-03 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-04 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-05 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-06 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-07 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-08 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-09 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-10 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.
Sample: L561853-11 Account: CORCOMGCO Received: 02/23/12 09:00 Due Date: 03/01/12 00:00 RPT Date: 02/28/12 10:23
No Pres vials.



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Olsson Associates - GJ, CO
Tim Dobransky
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L561853

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February 28, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG579901	02/23/12 18:29
Ethylbenzene	< .0005	mg/l			WG579901	02/23/12 18:29
Toluene	< .005	mg/l			WG579901	02/23/12 18:29
Total Xylene	< .0015	mg/l			WG579901	02/23/12 18:29
a,a,a-Trifluorotoluene(PID)		% Rec.	104.9	55-122	WG579901	02/23/12 18:29
Total Xylene	< .0015	mg/l			WG580298	02/26/12 18:09
a,a,a-Trifluorotoluene(PID)		% Rec.	107.3	55-122	WG580298	02/26/12 18:09
Benzene	< .0005	mg/l			WG579905	02/23/12 18:57
Ethylbenzene	< .0005	mg/l			WG579905	02/23/12 18:57
Toluene	< .005	mg/l			WG579905	02/23/12 18:57
Total Xylene	< .0015	mg/l			WG579905	02/23/12 18:57
a,a,a-Trifluorotoluene(PID)		% Rec.	103.3	55-122	WG579905	02/23/12 18:57

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0478	95.6	79-114	WG579901
Ethylbenzene	mg/l	.05	0.0510	102.	80-116	WG579901
Toluene	mg/l	.05	0.0498	99.6	79-112	WG579901
Total Xylene	mg/l	.15	0.153	102.	84-118	WG579901
Total Xylene	mg/l	.15	0.153	102.	84-118	WG580298
a,a,a-Trifluorotoluene(PID)				104.7	55-122	WG580298
Benzene	mg/l	.05	0.0519	104.	79-114	WG579905
Ethylbenzene	mg/l	.05	0.0535	107.	80-116	WG579905
Toluene	mg/l	.05	0.0516	103.	79-112	WG579905
Total Xylene	mg/l	.15	0.162	108.	84-118	WG579905
a,a,a-Trifluorotoluene(PID)				101.5	55-122	WG579905

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0510	0.0478	102.	79-114	6.46	20	WG579901
Ethylbenzene	mg/l	0.0548	0.0510	110.	80-116	7.22	20	WG579901
Toluene	mg/l	0.0528	0.0498	106.	79-112	5.85	20	WG579901
Total Xylene	mg/l	0.165	0.153	110.	84-118	7.68	20	WG579901
Total Xylene	mg/l	0.144	0.153	96.0	84-118	5.46	20	WG580298
a,a,a-Trifluorotoluene(PID)				105.6	55-122			WG580298
Benzene	mg/l	0.0515	0.0519	103.	79-114	0.760	20	WG579905
Ethylbenzene	mg/l	0.0527	0.0535	105.	80-116	1.40	20	WG579905
Toluene	mg/l	0.0506	0.0516	101.	79-112	1.92	20	WG579905
Total Xylene	mg/l	0.160	0.162	106.	84-118	1.45	20	WG579905
a,a,a-Trifluorotoluene(PID)				101.1	55-122			WG579905

Analyte	Units	Matrix Spike			Limit	Ref Samp	Batch
		MS Res	Ref Res	TV			
Benzene	mg/l	0.0505	0	.05	35-147	L561853-01	WG579901

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Tim Dobransky
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Grand Junction, CO 81505

Quality Assurance Report
Level II

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February 28, 2012

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Ethylbenzene	mg/l	0.0518	0	.05	104.	39-141	L561853-01	WG579901
Toluene	mg/l	0.0512	0	.05	102.	35-148	L561853-01	WG579901
Total Xylene	mg/l	0.156	0	.15	104.	33-151	L561853-01	WG579901
Total Xylene	mg/l	0.143	0	.15	95.3	33-151	L562197-02	WG580298
a,a,a-Trifluorotoluene(PID)					104.7	55-122		WG580298
Benzene	mg/l	0.0497	0	.05	99.4	35-147	L561763-01	WG579905
Ethylbenzene	mg/l	0.0518	0.000167	.05	103.	39-141	L561763-01	WG579905
Toluene	mg/l	0.0500	0.000299	.05	99.5	35-148	L561763-01	WG579905
Total Xylene	mg/l	0.158	0.000539	.15	105.	33-151	L561763-01	WG579905
a,a,a-Trifluorotoluene(PID)					101.4	55-122		WG579905

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0497	0.0505	99.5	35-147	1.52	20	L561853-01	WG579901
Ethylbenzene	mg/l	0.0516	0.0518	103.	39-141	0.430	20	L561853-01	WG579901
Toluene	mg/l	0.0509	0.0512	102.	35-148	0.670	20	L561853-01	WG579901
Total Xylene	mg/l	0.154	0.156	103.	33-151	1.11	20	L561853-01	WG579901
Total Xylene	mg/l	0.151	0.143	101.	33-151	5.58	20	L562197-02	WG580298
a,a,a-Trifluorotoluene(PID)				104.8	55-122				WG580298
Benzene	mg/l	0.0501	0.0497	100.	35-147	0.750	20	L561763-01	WG579905
Ethylbenzene	mg/l	0.0517	0.0518	103.	39-141	0.0800	20	L561763-01	WG579905
Toluene	mg/l	0.0500	0.0500	99.3	35-148	0.160	20	L561763-01	WG579905
Total Xylene	mg/l	0.157	0.158	104.	33-151	0.320	20	L561763-01	WG579905
a,a,a-Trifluorotoluene(PID)				101.0	55-122				WG579905

Batch number /Run number / Sample number cross reference

WG579901: R2049252: L561853-01 02 03 04 05 06 07 08 09

WG580298: R2049354: L561853-02 03

WG579905: R2050232: L561853-10 11

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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February 28, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Monday March 26, 2012

Report Number: L565892

Samples Received: 03/20/12

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : OXY-DG 1

Collected By : Jesica Sutrina
Collection Date : 03/19/12 10:25

ESC Sample # : L565892-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : Jessica Sutrina
Collection Date : 03/19/12 10:50

ESC Sample # : L565892-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.39	0.0050	mg/l	8021B	03/26/12	10
Toluene	0.058	0.010	mg/l	8021B	03/21/12	2
Ethylbenzene	0.063	0.0010	mg/l	8021B	03/21/12	2
Total Xylene	1.5	0.015	mg/l	8021B	03/26/12	10
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	114.		% Rec.	8021B	03/21/12	2

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : Jessica Sutrina
Collection Date : 03/19/12 11:00

ESC Sample # : L565892-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/21/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : Jessica Sutrina
Collection Date : 03/19/12 11:10

ESC Sample # : L565892-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/26/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : Jesica Sutrina
Collection Date : 03/19/12 11:25

ESC Sample # : L565892-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/21/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : Jesica Sutrina
Collection Date : 03/19/12 11:35

ESC Sample # : L565892-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : Jessica Sutrina
Collection Date : 03/19/12 11:40

ESC Sample # : L565892-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0020	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : Jessica Sutrina
Collection Date : 03/19/12 11:50

ESC Sample # : L565892-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/21/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : Jesica Sutrina
Collection Date : 03/19/12 12:00

ESC Sample # : L565892-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : Jessica Sutrina
Collection Date : 03/19/12 12:10

ESC Sample # : L565892-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : Jesica Sutrina
Collection Date : 03/19/12 12:20

ESC Sample # : L565892-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0064	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : Jesica Sutrina
Collection Date : 03/19/12 12:35

ESC Sample # : L565892-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	91.9		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates - GJ, CO
826 21 1/2 Road
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March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S12

Collected By : Jesica Sutrina
Collection Date : 03/19/12 12:40

ESC Sample # : L565892-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	91.9		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : Jessica Sutrina
Collection Date : 03/19/12 12:50

ESC Sample # : L565892-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	93.0		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : Jesica Sutrina
Collection Date : 03/19/12 12:55

ESC Sample # : L565892-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	91.7		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : Jesica Sutrina
Collection Date : 03/19/12 13:05

ESC Sample # : L565892-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	91.8		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

March 26, 2012

Date Received : March 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : Jesica Sutrina
Collection Date : 03/19/12 13:10

ESC Sample # : L565892-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	03/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	03/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	03/22/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	92.0		% Rec.	8021B	03/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Summary of Remarks For Samples Printed
03/26/12 at 10:54:01

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L565892-01 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-02 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-03 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-04 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-05 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-06 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-07 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-08 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-09 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-10 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-11 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-12 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-13 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-14 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-15 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-16 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53
Sample: L565892-17 Account: CORCOMGCO Received: 03/20/12 09:00 Due Date: 03/27/12 00:00 RPT Date: 03/26/12 10:53



YOUR LAB OF CHOICE

Olsson Associates - GJ, CO
Tim Dobransky
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L565892

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Est. 1970

March 26, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG583989	03/22/12 00:00
Ethylbenzene	< .0005	mg/l			WG583989	03/22/12 00:00
Toluene	< .005	mg/l			WG583989	03/22/12 00:00
Total Xylene	< .0015	mg/l			WG583989	03/22/12 00:00
a,a,a-Trifluorotoluene(PID)		% Rec.	92.01	55-122	WG583989	03/22/12 00:00
Benzene	< .0005	mg/l			WG583854	03/21/12 15:00
Ethylbenzene	< .0005	mg/l			WG583854	03/21/12 15:00
Toluene	< .005	mg/l			WG583854	03/21/12 15:00
Total Xylene	< .0015	mg/l			WG583854	03/21/12 15:00
a,a,a-Trifluorotoluene(PID)		% Rec.	106.3	55-122	WG583854	03/21/12 15:00
Benzene	< .0005	mg/l			WG584692	03/25/12 22:54
Total Xylene	< .0015	mg/l			WG584692	03/25/12 22:54
a,a,a-Trifluorotoluene(PID)		% Rec.	101.6	55-122	WG584692	03/25/12 22:54

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0482	96.4	79-114	WG583989
Ethylbenzene	mg/l	.05	0.0488	97.6	80-116	WG583989
Toluene	mg/l	.05	0.0472	94.4	79-112	WG583989
Total Xylene	mg/l	.15	0.147	98.0	84-118	WG583989
a,a,a-Trifluorotoluene(PID)				94.44	55-122	WG583989
Benzene	mg/l	.05	0.0507	101.	79-114	WG583854
Ethylbenzene	mg/l	.05	0.0571	114.	80-116	WG583854
Toluene	mg/l	.05	0.0558	112.	79-112	WG583854
Total Xylene	mg/l	.15	0.152	101.	84-118	WG583854
a,a,a-Trifluorotoluene(PID)				107.5	55-122	WG583854
Benzene	mg/l	.05	0.0522	104.	79-114	WG584692
Total Xylene	mg/l	.15	0.160	106.	84-118	WG584692
a,a,a-Trifluorotoluene(PID)				101.5	55-122	WG584692

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0469	0.0482	94.0	79-114	2.71	20	WG583989
Ethylbenzene	mg/l	0.0480	0.0488	96.0	80-116	1.70	20	WG583989
Toluene	mg/l	0.0463	0.0472	93.0	79-112	1.92	20	WG583989
Total Xylene	mg/l	0.145	0.147	96.0	84-118	1.62	20	WG583989
a,a,a-Trifluorotoluene(PID)				92.09	55-122			WG583989
Benzene	mg/l	0.0505	0.0507	101.	79-114	0.390	20	WG583854
Ethylbenzene	mg/l	0.0568	0.0571	114.	80-116	0.580	20	WG583854
Toluene	mg/l	0.0557	0.0558	111.	79-112	0.300	20	WG583854
Total Xylene	mg/l	0.148	0.152	99.0	84-118	2.32	20	WG583854
a,a,a-Trifluorotoluene(PID)				108.6	55-122			WG583854
Benzene	mg/l	0.0514	0.0522	103.	79-114	1.67	20	WG584692
Total Xylene	mg/l	0.160	0.160	107.	84-118	0.360	20	WG584692
a,a,a-Trifluorotoluene(PID)				101.1	55-122			WG584692

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Olsson Associates - GJ, CO
Tim Dobransky
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L565892

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Tax I.D. 62-0814289

Est. 1970

March 26, 2012

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Benzene	mg/l	0.0512	0.00320	.05	95.9	35-147	L565653-05	WG583989
Ethylbenzene	mg/l	0.0577	0.00870	.05	97.9	39-141	L565653-05	WG583989
Toluene	mg/l	0.0483	0	.05	96.6	35-148	L565653-05	WG583989
Total Xylene	mg/l	0.152	0.00160	.15	100.	33-151	L565653-05	WG583989
a,a,a-Trifluorotoluene(PID)					93.97	55-122		WG583989
Benzene	mg/l	0.0521	0	.05	104.	35-147	L565892-03	WG583854
Ethylbenzene	mg/l	0.0590	0	.05	118.	39-141	L565892-03	WG583854
Toluene	mg/l	0.0581	0	.05	116.	35-148	L565892-03	WG583854
Total Xylene	mg/l	0.154	0	.15	103.	33-151	L565892-03	WG583854
a,a,a-Trifluorotoluene(PID)					108.2	55-122		WG583854
Benzene	mg/l	0.0505	0.000820	.05	99.4	35-147	L565808-05	WG584692
Total Xylene	mg/l	0.152	0	.15	102.	33-151	L565808-05	WG584692
a,a,a-Trifluorotoluene(PID)					100.9	55-122		WG584692

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0511	0.0512	95.8	35-147	0.180	20	L565653-05	WG583989
Ethylbenzene	mg/l	0.0568	0.0577	96.2	39-141	1.44	20	L565653-05	WG583989
Toluene	mg/l	0.0472	0.0483	94.3	35-148	2.36	20	L565653-05	WG583989
Total Xylene	mg/l	0.149	0.152	98.5	33-151	1.86	20	L565653-05	WG583989
a,a,a-Trifluorotoluene(PID)				92.00	55-122				WG583989
Benzene	mg/l	0.0516	0.0521	103.	35-147	0.880	20	L565892-03	WG583854
Ethylbenzene	mg/l	0.0581	0.0590	116.	39-141	1.43	20	L565892-03	WG583854
Toluene	mg/l	0.0572	0.0581	114.	35-148	1.67	20	L565892-03	WG583854
Total Xylene	mg/l	0.152	0.154	101.	33-151	1.84	20	L565892-03	WG583854
a,a,a-Trifluorotoluene(PID)				108.8	55-122				WG583854
Benzene	mg/l	0.0508	0.0505	99.9	35-147	0.560	20	L565808-05	WG584692
Total Xylene	mg/l	0.154	0.152	103.	33-151	1.05	20	L565808-05	WG584692
a,a,a-Trifluorotoluene(PID)				100.6	55-122				WG584692

Batch number /Run number / Sample number cross reference

WG583989: R2085315: L565892-12 13 14 15 16 17
WG583854: R2087454: L565892-01 02 03 04 05 06 07 08 09 10 11
WG584692: R2088174: L565892-02 04

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Olsson Associates - GJ, CO
Tim Dobransky
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L565892

12065 Lebanon Rd.
Mt. Juliet, TN 37122
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March 26, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Sunday April 22, 2012

Report Number: L570569

Samples Received: 04/18/12

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : OXY-DG1

Collected By : J. Sutrina
Collection Date : 04/17/12 11:00

ESC Sample # : L570569-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 04/17/12 11:30

ESC Sample # : L570569-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.35	0.0050	mg/l	8021B	04/19/12	10
Toluene	0.077	0.050	mg/l	8021B	04/19/12	10
Ethylbenzene	0.090	0.0050	mg/l	8021B	04/19/12	10
Total Xylene	1.5	0.015	mg/l	8021B	04/19/12	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	04/19/12	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 04/17/12 11:40

ESC Sample # : L570569-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : J. Sutrina
Collection Date : 04/17/12 11:50

ESC Sample # : L570569-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 04/17/12 12:10

ESC Sample # : L570569-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 04/17/12 12:20

ESC Sample # : L570569-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 04/17/12 12:30

ESC Sample # : L570569-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0015	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : J. Sutrina
Collection Date : 04/17/12 12:40

ESC Sample # : L570569-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 04/17/12 12:50

ESC Sample # : L570569-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 04/17/12 13:10

ESC Sample # : L570569-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0074	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 04/17/12 13:20

ESC Sample # : L570569-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 04/17/12 13:00

ESC Sample # : L570569-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S12

Collected By : J. Sutrina
Collection Date : 04/17/12 13:30

ESC Sample # : L570569-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 04/17/12 13:40

ESC Sample # : L570569-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S10

Collected By : J. Sutrina
Collection Date : 04/17/12 13:50

ESC Sample # : L570569-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : J. Sutrina
Collection Date : 04/17/12 14:00

ESC Sample # : L570569-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	0.0031	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : J. Sutrina
Collection Date : 04/17/12 14:10

ESC Sample # : L570569-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 04/17/12 14:20

ESC Sample # : L570569-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

April 22, 2012

Date Received : April 18, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S1

Collected By : J. Sutrina
Collection Date : 04/17/12 14:30

ESC Sample # : L570569-19

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	04/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	04/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	04/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	04/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 04/22/12 15:08 Printed: 04/22/12 15:08

Summary of Remarks For Samples Printed
04/22/12 at 15:08:57

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L570569-01 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-02 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-03 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-04 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-05 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-06 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-07 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-08 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-09 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-10 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-11 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-12 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-13 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-14 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-15 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-16 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-17 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-18 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08
Sample: L570569-19 Account: CORCOMGCO Received: 04/18/12 09:00 Due Date: 04/25/12 00:00 RPT Date: 04/22/12 15:08



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April 22, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG588419	04/19/12 13:06
Ethylbenzene	< .0005	mg/l			WG588419	04/19/12 13:06
Toluene	< .005	mg/l			WG588419	04/19/12 13:06
Total Xylene	< .0015	mg/l			WG588419	04/19/12 13:06
a,a,a-Trifluorotoluene(PID)		% Rec.	106.6	55-122	WG588419	04/19/12 13:06
Benzene	< .0005	mg/l			WG588363	04/18/12 18:37
Ethylbenzene	< .0005	mg/l			WG588363	04/18/12 18:37
Toluene	< .005	mg/l			WG588363	04/18/12 18:37
Total Xylene	< .0015	mg/l			WG588363	04/18/12 18:37
a,a,a-Trifluorotoluene(PID)		% Rec.	105.6	55-122	WG588363	04/18/12 18:37
Benzene	< .0005	mg/l			WG588420	04/19/12 09:46
Ethylbenzene	< .0005	mg/l			WG588420	04/19/12 09:46
Toluene	< .005	mg/l			WG588420	04/19/12 09:46
Total Xylene	< .0015	mg/l			WG588420	04/19/12 09:46
a,a,a-Trifluorotoluene(PID)		% Rec.	103.4	55-122	WG588420	04/19/12 09:46

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0476	95.2	79-114	WG588419
Ethylbenzene	mg/l	.05	0.0488	97.6	80-116	WG588419
Toluene	mg/l	.05	0.0481	96.2	79-112	WG588419
Total Xylene	mg/l	.15	0.148	98.5	84-118	WG588419
a,a,a-Trifluorotoluene(PID)				105.0	55-122	WG588419
Benzene	mg/l	.05	0.0488	97.7	79-114	WG588363
Ethylbenzene	mg/l	.05	0.0500	100.	80-116	WG588363
Toluene	mg/l	.05	0.0493	98.7	79-112	WG588363
Total Xylene	mg/l	.15	0.152	101.	84-118	WG588363
a,a,a-Trifluorotoluene(PID)				104.8	55-122	WG588363
Benzene	mg/l	.05	0.0446	89.3	79-114	WG588420
Ethylbenzene	mg/l	.05	0.0448	89.5	80-116	WG588420
Toluene	mg/l	.05	0.0469	93.9	79-112	WG588420
Total Xylene	mg/l	.15	0.144	96.0	84-118	WG588420
a,a,a-Trifluorotoluene(PID)				101.9	55-122	WG588420

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0485	0.0476	97.0	79-114	1.81	20	WG588419
Ethylbenzene	mg/l	0.0495	0.0488	99.0	80-116	1.49	20	WG588419
Toluene	mg/l	0.0491	0.0481	98.0	79-112	1.98	20	WG588419
Total Xylene	mg/l	0.150	0.148	100.	84-118	1.48	20	WG588419
a,a,a-Trifluorotoluene(PID)				105.0	55-122			WG588419
Benzene	mg/l	0.0481	0.0488	96.0	79-114	1.55	20	WG588363
Ethylbenzene	mg/l	0.0498	0.0500	100.	80-116	0.480	20	WG588363
Toluene	mg/l	0.0491	0.0493	98.0	79-112	0.410	20	WG588363
Total Xylene	mg/l	0.150	0.152	100.	84-118	1.03	20	WG588363
a,a,a-Trifluorotoluene(PID)				105.8	55-122			WG588363

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0474	0.0446	95.0	79-114	5.96	20	WG588420
Ethylbenzene	mg/l	0.0467	0.0448	93.0	80-116	4.11	20	WG588420
Toluene	mg/l	0.0486	0.0469	97.0	79-112	3.45	20	WG588420
Total Xylene	mg/l	0.149	0.144	100.	84-118	3.59	20	WG588420
a,a,a-Trifluorotoluene(PID)				101.6	55-122			WG588420

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0489	0.000840	.05	96.2	35-147	L570584-01	WG588419
Ethylbenzene	mg/l	0.0490	0	.05	98.0	39-141	L570584-01	WG588419
Toluene	mg/l	0.0493	0	.05	98.6	35-148	L570584-01	WG588419
Total Xylene	mg/l	0.149	0	.15	99.2	33-151	L570584-01	WG588419
a,a,a-Trifluorotoluene(PID)					104.0	55-122		WG588419

Benzene	mg/l	0.0485	0	.05	96.9	35-147	L570501-01	WG588363
Ethylbenzene	mg/l	0.0500	0	.05	99.9	39-141	L570501-01	WG588363
Toluene	mg/l	0.0491	0	.05	98.3	35-148	L570501-01	WG588363
Total Xylene	mg/l	0.151	0	.15	101.	33-151	L570501-01	WG588363
a,a,a-Trifluorotoluene(PID)					104.4	55-122		WG588363

Benzene	mg/l	0.0483	0	.05	96.6	35-147	L570585-02	WG588420
Ethylbenzene	mg/l	0.0471	0	.05	94.2	39-141	L570585-02	WG588420
Toluene	mg/l	0.0499	0	.05	99.8	35-148	L570585-02	WG588420
Total Xylene	mg/l	0.151	0	.15	100.	33-151	L570585-02	WG588420
a,a,a-Trifluorotoluene(PID)					102.2	55-122		WG588420

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0484	0.0489	95.2	35-147	1.02	20	L570584-01	WG588419
Ethylbenzene	mg/l	0.0486	0.0490	97.2	39-141	0.820	20	L570584-01	WG588419
Toluene	mg/l	0.0485	0.0493	97.1	35-148	1.57	20	L570584-01	WG588419
Total Xylene	mg/l	0.147	0.149	98.0	33-151	1.25	20	L570584-01	WG588419
a,a,a-Trifluorotoluene(PID)				104.1	55-122				WG588419

Benzene	mg/l	0.0482	0.0485	96.3	35-147	0.620	20	L570501-01	WG588363
Ethylbenzene	mg/l	0.0499	0.0500	99.9	39-141	0.0500	20	L570501-01	WG588363
Toluene	mg/l	0.0490	0.0491	98.0	35-148	0.260	20	L570501-01	WG588363
Total Xylene	mg/l	0.151	0.151	101.	33-151	0.0100	20	L570501-01	WG588363
a,a,a-Trifluorotoluene(PID)				104.5	55-122				WG588363

Benzene	mg/l	0.0494	0.0483	98.8	35-147	2.21	20	L570585-02	WG588420
Ethylbenzene	mg/l	0.0477	0.0471	95.4	39-141	1.25	20	L570585-02	WG588420
Toluene	mg/l	0.0500	0.0499	99.9	35-148	0.0900	20	L570585-02	WG588420
Total Xylene	mg/l	0.153	0.151	102.	33-151	1.14	20	L570585-02	WG588420
a,a,a-Trifluorotoluene(PID)				101.6	55-122				WG588420

Batch number /Run number / Sample number cross reference

WG588419: R2131513: L570569-16 17 18

WG588363: R2133893: L570569-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

WG588420: R2134593: L570569-19

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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April 22, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Tuesday May 29, 2012

Report Number: L576717

Samples Received: 05/23/12

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jayred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : OXY-DG1

Collected By : J. Sutrina
Collection Date : 05/22/12 10:15

ESC Sample # : L576717-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : J. Sutrina
Collection Date : 05/22/12 10:55

ESC Sample # : L576717-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.17	0.0025	mg/l	8021B	05/24/12	5
Toluene	0.16	0.025	mg/l	8021B	05/24/12	5
Ethylbenzene	0.040	0.0025	mg/l	8021B	05/24/12	5
Total Xylene	0.60	0.0075	mg/l	8021B	05/24/12	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	05/24/12	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : J. Sutrina
Collection Date : 05/22/12 11:10

ESC Sample # : L576717-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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826 21 1/2 Road
Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P1A

Collected By : J. Sutrina
Collection Date : 05/22/12 11:20

ESC Sample # : L576717-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/28/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/28/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/28/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/28/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	96.1		% Rec.	8021B	05/28/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : J. Sutrina
Collection Date : 05/22/12 11:30

ESC Sample # : L576717-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P3

Collected By : J. Sutrina
Collection Date : 05/22/12 11:40

ESC Sample # : L576717-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : J. Sutrina
Collection Date : 05/22/12 11:55

ESC Sample # : L576717-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 05/22/12 12:05

ESC Sample # : L576717-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0034	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : J. Sutrina
Collection Date : 05/22/12 12:15

ESC Sample # : L576717-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00095	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 05/22/12 12:25

ESC Sample # : L576717-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 05/22/12 12:35

ESC Sample # : L576717-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/28/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/28/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/28/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/28/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	95.6		% Rec.	8021B	05/28/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Grand Junction, CO 81505

May 29, 2012

Date Received : May 23, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 05/22/12 12:45

ESC Sample # : L576717-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.072	0.00050	mg/l	8021B	05/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/24/12	1
Ethylbenzene	0.017	0.00050	mg/l	8021B	05/24/12	1
Total Xylene	0.45	0.0015	mg/l	8021B	05/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	05/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Summary of Remarks For Samples Printed
05/29/12 at 16:42:19

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L576717-01 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-02 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-03 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-04 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-05 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-06 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-07 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-08 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-09 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-10 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-11 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41
Sample: L576717-12 Account: CORCOMGCO Received: 05/23/12 09:00 Due Date: 05/31/12 00:00 RPT Date: 05/29/12 16:41



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Olsson Associates - GJ, CO
Tim Dobransky
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L576717

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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG594341	05/24/12 16:28
Ethylbenzene	< .0005	mg/l			WG594341	05/24/12 16:28
Toluene	< .005	mg/l			WG594341	05/24/12 16:28
Total Xylene	< .0015	mg/l			WG594341	05/24/12 16:28
a,a,a-Trifluorotoluene(PID)		% Rec.	101.0	55-122	WG594341	05/24/12 16:28
Benzene	< .0005	mg/l			WG594931	05/28/12 01:18
Ethylbenzene	< .0005	mg/l			WG594931	05/28/12 01:18
Toluene	< .005	mg/l			WG594931	05/28/12 01:18
Total Xylene	< .0015	mg/l			WG594931	05/28/12 01:18
a,a,a-Trifluorotoluene(PID)		% Rec.	96.37	55-122	WG594931	05/28/12 01:18

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0435	87.1	79-114	WG594341
Ethylbenzene	mg/l	.05	0.0441	88.2	80-116	WG594341
Toluene	mg/l	.05	0.0430	86.1	79-112	WG594341
Total Xylene	mg/l	.15	0.136	90.5	84-118	WG594341
a,a,a-Trifluorotoluene(PID)				99.49	55-122	WG594341
Benzene	mg/l	.05	0.0459	91.8	79-114	WG594931
Ethylbenzene	mg/l	.05	0.0467	93.5	80-116	WG594931
Toluene	mg/l	.05	0.0458	91.6	79-112	WG594931
Total Xylene	mg/l	.15	0.141	94.2	84-118	WG594931
a,a,a-Trifluorotoluene(PID)				94.97	55-122	WG594931

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0425	0.0435	85.0	79-114	2.31	20	WG594341
Ethylbenzene	mg/l	0.0423	0.0441	84.0	80-116	4.13	20	WG594341
Toluene	mg/l	0.0422	0.0430	84.0	79-112	1.97	20	WG594341
Total Xylene	mg/l	0.132	0.136	88.0	84-118	2.49	20	WG594341
a,a,a-Trifluorotoluene(PID)				99.96	55-122			WG594341
Benzene	mg/l	0.0458	0.0459	92.0	79-114	0.0800	20	WG594931
Ethylbenzene	mg/l	0.0480	0.0467	96.0	80-116	2.56	20	WG594931
Toluene	mg/l	0.0460	0.0458	92.0	79-112	0.370	20	WG594931
Total Xylene	mg/l	0.145	0.141	96.0	84-118	2.43	20	WG594931
a,a,a-Trifluorotoluene(PID)				95.84	55-122			WG594931

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/l	0.0424	0	.05	84.7	35-147	L576717-01	WG594341
Ethylbenzene	mg/l	0.0428	0	.05	85.6	39-141	L576717-01	WG594341
Toluene	mg/l	0.0430	0	.05	86.0	35-148	L576717-01	WG594341
Total Xylene	mg/l	0.133	0	.15	88.9	33-151	L576717-01	WG594341
a,a,a-Trifluorotoluene(PID)					101.8	55-122		WG594341
Benzene	mg/l	0.0472	0	.05	94.3	35-147	L576885-05	WG594931
Ethylbenzene	mg/l	0.0488	0	.05	97.6	39-141	L576885-05	WG594931
Toluene	mg/l	0.0479	0	.05	95.8	35-148	L576885-05	WG594931
Total Xylene	mg/l	0.148	0	.15	98.8	33-151	L576885-05	WG594931

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Tim Dobransky
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Grand Junction, CO 81505

Quality Assurance Report
Level II

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May 29, 2012

Analyte	Units	MS Res	Matrix Spike		TV	% Rec	Limit	Ref Samp	Batch
			Ref Res	TV					
a,a,a-Trifluorotoluene(PID)						97.37	55-122		

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0425	0.0424	84.9	35-147	0.210	20	L576717-01	WG594341
Ethylbenzene	mg/l	0.0420	0.0428	84.0	39-141	1.78	20	L576717-01	WG594341
Toluene	mg/l	0.0421	0.0430	84.2	35-148	2.08	20	L576717-01	WG594341
Total Xylene	mg/l	0.131	0.133	87.5	33-151	1.56	20	L576717-01	WG594341
a,a,a-Trifluorotoluene(PID)				100.6	55-122				WG594341
Benzene	mg/l	0.0452	0.0472	90.5	35-147	4.14	20	L576885-05	WG594931
Ethylbenzene	mg/l	0.0469	0.0488	93.8	39-141	3.97	20	L576885-05	WG594931
Toluene	mg/l	0.0450	0.0479	90.1	35-148	6.21	20	L576885-05	WG594931
Total Xylene	mg/l	0.141	0.148	94.3	33-151	4.66	20	L576885-05	WG594931
a,a,a-Trifluorotoluene(PID)				95.23	55-122				WG594931

Batch number /Run number / Sample number cross reference

WG594341: R2184513: L576717-01 02 03 05 06 07 08 09 10 12
WG594931: R2188173: L576717-04 11

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report
Level II

L576717

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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Tuesday May 29, 2012

Report Number: L576876

Samples Received: 05/24/12

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jayred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 05/23/12 10:05

ESC Sample # : L576876-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0012	0.00050	mg/l	8021B	05/27/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/27/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Total Xylene	0.014	0.0015	mg/l	8021B	05/27/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	05/27/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 05/23/12 10:35

ESC Sample # : L576876-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/27/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/27/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/27/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S12

Collected By : J. Sutrina
Collection Date : 05/23/12 10:30

ESC Sample # : L576876-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/27/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/27/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	05/27/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 05/23/12 10:40

ESC Sample # : L576876-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/27/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/27/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/27/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : J. Sutrina
Collection Date : 05/23/12 10:45

ESC Sample # : L576876-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/27/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/27/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/27/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S5

Collected By : J. Sutrina
Collection Date : 05/23/12 10:55

ESC Sample # : L576876-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/27/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/27/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/27/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : J. Sutrina
Collection Date : 05/23/12 11:05

ESC Sample # : L576876-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/27/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/27/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/27/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	05/27/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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May 29, 2012

Date Received : May 24, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S1

Collected By : J. Sutrina
Collection Date : 05/23/12 11:10

ESC Sample # : L576876-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	05/25/12	1
Toluene	BDL	0.0050	mg/l	8021B	05/25/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	05/25/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	05/25/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	05/25/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 05/29/12 13:13 Printed: 05/29/12 13:14

Summary of Remarks For Samples Printed
05/29/12 at 13:14:29

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L576876-01 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13
Sample: L576876-02 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13
Sample: L576876-03 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13
Sample: L576876-04 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13
Sample: L576876-05 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13
Sample: L576876-06 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13
Sample: L576876-07 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13
Sample: L576876-08 Account: CORCOMGCO Received: 05/24/12 09:00 Due Date: 06/01/12 00:00 RPT Date: 05/29/12 13:13



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Quality Assurance Report
Level II

L576876

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May 29, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG594594	05/25/12 14:05
Ethylbenzene	< .0005	mg/l			WG594594	05/25/12 14:05
Toluene	< .005	mg/l			WG594594	05/25/12 14:05
Total Xylene	< .0015	mg/l			WG594594	05/25/12 14:05
a,a,a-Trifluorotoluene(PID)		% Rec.	101.5	55-122	WG594594	05/25/12 14:05
Benzene	< .0005	mg/l			WG594618	05/27/12 08:21
Ethylbenzene	< .0005	mg/l			WG594618	05/27/12 08:21
Toluene	< .005	mg/l			WG594618	05/27/12 08:21
Total Xylene	< .0015	mg/l			WG594618	05/27/12 08:21
a,a,a-Trifluorotoluene(PID)		% Rec.	106.1	55-122	WG594618	05/27/12 08:21

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0414	82.7	79-114	WG594594
Ethylbenzene	mg/l	.05	0.0410	82.0	80-116	WG594594
Toluene	mg/l	.05	0.0412	82.5	79-112	WG594594
Total Xylene	mg/l	.15	0.129	85.8	84-118	WG594594
a,a,a-Trifluorotoluene(PID)				101.0	55-122	WG594594
Benzene	mg/l	.05	0.0516	103.	79-114	WG594618
Ethylbenzene	mg/l	.05	0.0530	106.	80-116	WG594618
Toluene	mg/l	.05	0.0524	105.	79-112	WG594618
Total Xylene	mg/l	.15	0.159	106.	84-118	WG594618
a,a,a-Trifluorotoluene(PID)				105.2	55-122	WG594618

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0420	0.0414	84.0	79-114	1.63	20	WG594594
Ethylbenzene	mg/l	0.0417	0.0410	83.0	80-116	1.55	20	WG594594
Toluene	mg/l	0.0416	0.0412	83.0	79-112	0.810	20	WG594594
Total Xylene	mg/l	0.130	0.129	87.0	84-118	1.02	20	WG594594
a,a,a-Trifluorotoluene(PID)				100.7	55-122			WG594594
Benzene	mg/l	0.0528	0.0516	106.	79-114	2.32	20	WG594618
Ethylbenzene	mg/l	0.0541	0.0530	108.	80-116	2.05	20	WG594618
Toluene	mg/l	0.0532	0.0524	106.	79-112	1.40	20	WG594618
Total Xylene	mg/l	0.163	0.159	109.	84-118	2.23	20	WG594618
a,a,a-Trifluorotoluene(PID)				105.6	55-122			WG594618

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/l	0.0423	0	.05	84.7	35-147	L576876-08	WG594594
Ethylbenzene	mg/l	0.0424	0	.05	84.9	39-141	L576876-08	WG594594
Toluene	mg/l	0.0432	0	.05	86.3	35-148	L576876-08	WG594594
Total Xylene	mg/l	0.133	0	.15	88.9	33-151	L576876-08	WG594594
a,a,a-Trifluorotoluene(PID)					100.8	55-122		WG594594
Benzene	mg/l	0.0511	0.00120	.05	99.7	35-147	L576876-01	WG594618
Ethylbenzene	mg/l	0.0524	0	.05	105.	39-141	L576876-01	WG594618
Toluene	mg/l	0.0535	0	.05	107.	35-148	L576876-01	WG594618
Total Xylene	mg/l	0.159	0.0140	.15	96.6	33-151	L576876-01	WG594618

* Performance of this Analyte is outside of established criteria.

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
a,a,a-Trifluorotoluene(PID)					106.2	55-122				

Analyte	Units	MSD	Matrix Spike	Duplicate	Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
Benzene	mg/l	0.0430	0.0423	85.9	35-147	1.44	20	L576876-08	WG594594	
Ethylbenzene	mg/l	0.0428	0.0424	85.7	39-141	0.930	20	L576876-08	WG594594	
Toluene	mg/l	0.0426	0.0432	85.3	35-148	1.19	20	L576876-08	WG594594	
Total Xylene	mg/l	0.133	0.133	88.7	33-151	0.200	20	L576876-08	WG594594	
a,a,a-Trifluorotoluene (PID)				100.6	55-122					WG594594
Benzene	mg/l	0.0495	0.0511	96.6	35-147	3.11	20	L576876-01	WG594618	
Ethylbenzene	mg/l	0.0503	0.0524	101.	39-141	4.13	20	L576876-01	WG594618	
Toluene	mg/l	0.0501	0.0535	100.	35-148	6.53	20	L576876-01	WG594618	
Total Xylene	mg/l	0.151	0.159	91.6	33-151	4.80	20	L576876-01	WG594618	
a,a,a-Trifluorotoluene (PID)				106.4	55-122					WG594618

Batch number /Run number / Sample number cross reference

WG594594: R2186233: L576876-08

WG594618: R2187633: L576876-01 02 03 04 05 06 07

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For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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May 29, 2012

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Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Tuesday June 26, 2012

Report Number: L581248

Samples Received: 06/20/12

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : OXY DG1

Collected By : JS/WF
Collection Date : 06/19/12 10:15

ESC Sample # : L581248-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P15

Collected By : JS/WF
Collection Date : 06/19/12 10:35

ESC Sample # : L581248-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.18	0.00050	mg/l	8021B	06/21/12	1
Toluene	0.080	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	0.031	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	0.20	0.015	mg/l	8021B	06/22/12	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P1

Collected By : JS/WF
Collection Date : 06/19/12 10:45

ESC Sample # : L581248-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00056	0.00050	mg/l	8021B	06/20/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/20/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/20/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/20/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/20/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P1A

Collected By : JS/WF
Collection Date : 06/19/12 10:55

ESC Sample # : L581248-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P2

Collected By : JS/WF
Collection Date : 06/19/12 11:05

ESC Sample # : L581248-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.00069	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : JS/WF
Collection Date : 06/19/12 11:15

ESC Sample # : L581248-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.036	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	0.014	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	0.28	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P5

Collected By : JS/WF
Collection Date : 06/19/12 11:25

ESC Sample # : L581248-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0012	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P6

Collected By : JS/WF
Collection Date : 06/19/12 11:35

ESC Sample # : L581248-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
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826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P7

Collected By : JS/WF
Collection Date : 06/19/12 11:45

ESC Sample # : L581248-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0026	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P8

Collected By : JS/WF
Collection Date : 06/19/12 11:55

ESC Sample # : L581248-10

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0030	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P10

Collected By : JS/WF
Collection Date : 06/19/12 12:05

ESC Sample # : L581248-11

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0027	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P9

Collected By : JS/WF
Collection Date : 06/19/12 12:15

ESC Sample # : L581248-12

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.037	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	0.0036	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	0.16	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : DG1

Collected By : JS/WF
Collection Date : 06/19/12 12:30

ESC Sample # : L581248-13

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S12

Collected By : JS/WF
Collection Date : 06/19/12 12:35

ESC Sample # : L581248-14

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

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Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S11

Collected By : JS/WF
Collection Date : 06/19/12 12:40

ESC Sample # : L581248-15

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	111.		% Rec.	8021B	06/21/12	1

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S9

Collected By : JS/WF
Collection Date : 06/19/12 12:45

ESC Sample # : L581248-16

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S7

Collected By : JS/WF
Collection Date : 06/19/12 12:50

ESC Sample # : L581248-17

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 06/26/12 11:54 Printed: 06/26/12 11:55



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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S6

Collected By : JS/WF
Collection Date : 06/19/12 12:55

ESC Sample # : L581248-18

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0055	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	0.0022	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S5

Collected By : JS/WF
Collection Date : 06/19/12 13:00

ESC Sample # : L581248-19

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	112.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tim Dobransky
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June 26, 2012

Date Received : June 20, 2012
Description : Oxy YT Ranch 17-5

Sample ID : S3

Collected By : JS/WF
Collection Date : 06/19/12 13:05

ESC Sample # : L581248-20

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/21/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/21/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/21/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	112.		% Rec.	8021B	06/21/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 06/26/12 11:54 Printed: 06/26/12 11:55

Summary of Remarks For Samples Printed
06/26/12 at 11:55:03

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L581248-01 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-02 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-03 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-04 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-05 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-06 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-07 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-08 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-09 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-10 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-11 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-12 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-13 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-14 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-15 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-16 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-17 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-18 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-19 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.
Sample: L581248-20 Account: CORCOMGCO Received: 06/20/12 09:00 Due Date: 06/27/12 00:00 RPT Date: 06/26/12 11:54
No Pres.



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Olsson Associates - GJ, CO
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Level II

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June 26, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG598921	06/20/12 20:12
Ethylbenzene	< .0005	mg/l			WG598921	06/20/12 20:12
Toluene	< .005	mg/l			WG598921	06/20/12 20:12
Total Xylene	< .0015	mg/l			WG598921	06/20/12 20:12
a,a,a-Trifluorotoluene(PID)		% Rec.	105.2	55-122	WG598921	06/20/12 20:12
Benzene	< .0005	mg/l			WG598901	06/20/12 17:50
Ethylbenzene	< .0005	mg/l			WG598901	06/20/12 17:50
Toluene	< .005	mg/l			WG598901	06/20/12 17:50
Total Xylene	< .0015	mg/l			WG598901	06/20/12 17:50
a,a,a-Trifluorotoluene(PID)		% Rec.	105.3	55-122	WG598901	06/20/12 17:50
Benzene	< .0005	mg/l			WG598984	06/21/12 13:19
Ethylbenzene	< .0005	mg/l			WG598984	06/21/12 13:19
Toluene	< .005	mg/l			WG598984	06/21/12 13:19
Total Xylene	< .0015	mg/l			WG598984	06/21/12 13:19
a,a,a-Trifluorotoluene(PID)		% Rec.	110.5	55-122	WG598984	06/21/12 13:19
Total Xylene	< .0015	mg/l			WG599228	06/22/12 13:12
a,a,a-Trifluorotoluene(PID)		% Rec.	102.9	55-122	WG599228	06/22/12 13:12

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0463	92.5	79-114	WG598921
Ethylbenzene	mg/l	.05	0.0485	97.0	80-116	WG598921
Toluene	mg/l	.05	0.0480	95.9	79-112	WG598921
Total Xylene	mg/l	.15	0.147	97.8	84-118	WG598921
a,a,a-Trifluorotoluene(PID)				105.6	55-122	WG598921
Benzene	mg/l	.05	0.0467	93.4	79-114	WG598901
Ethylbenzene	mg/l	.05	0.0505	101.	80-116	WG598901
Toluene	mg/l	.05	0.0479	95.7	79-112	WG598901
Total Xylene	mg/l	.15	0.155	103.	84-118	WG598901
a,a,a-Trifluorotoluene(PID)				104.0	55-122	WG598901
Benzene	mg/l	.05	0.0457	91.4	79-114	WG598984
Ethylbenzene	mg/l	.05	0.0515	103.	80-116	WG598984
Toluene	mg/l	.05	0.0499	99.8	79-112	WG598984
Total Xylene	mg/l	.15	0.155	103.	84-118	WG598984
a,a,a-Trifluorotoluene(PID)				110.4	55-122	WG598984
Total Xylene	mg/l	.15	0.149	99.6	84-118	WG599228
a,a,a-Trifluorotoluene(PID)				102.1	55-122	WG599228

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0438	0.0463	88.0	79-114	5.38	20	WG598921
Ethylbenzene	mg/l	0.0457	0.0485	91.0	80-116	5.94	20	WG598921
Toluene	mg/l	0.0450	0.0480	90.0	79-112	6.30	20	WG598921
Total Xylene	mg/l	0.138	0.147	92.0	84-118	6.04	20	WG598921
a,a,a-Trifluorotoluene(PID)				105.7	55-122			WG598921

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0469	0.0467	94.0	79-114	0.470	20	WG598901
Ethylbenzene	mg/l	0.0509	0.0505	102.	80-116	0.800	20	WG598901
Toluene	mg/l	0.0481	0.0479	96.0	79-112	0.490	20	WG598901
Total Xylene	mg/l	0.156	0.155	104.	84-118	0.850	20	WG598901
a,a,a-Trifluorotoluene(PID)				104.0	55-122			WG598901
Benzene	mg/l	0.0457	0.0457	91.0	79-114	0.100	20	WG598984
Ethylbenzene	mg/l	0.0514	0.0515	103.	80-116	0.160	20	WG598984
Toluene	mg/l	0.0497	0.0499	99.0	79-112	0.430	20	WG598984
Total Xylene	mg/l	0.154	0.155	103.	84-118	0.560	20	WG598984
a,a,a-Trifluorotoluene(PID)				110.4	55-122			WG598984
Total Xylene	mg/l	0.137	0.149	91.0	84-118	8.88	20	WG599228
a,a,a-Trifluorotoluene(PID)				101.3	55-122			WG599228

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/l	0.0460	0.000560	.05	90.8	35-147	L581248-03	WG598921
Ethylbenzene	mg/l	0.0485	0	.05	97.0	39-141	L581248-03	WG598921
Toluene	mg/l	0.0465	0	.05	92.9	35-148	L581248-03	WG598921
Total Xylene	mg/l	0.146	0	.15	97.4	33-151	L581248-03	WG598921
a,a,a-Trifluorotoluene(PID)					105.6	55-122		WG598921
Benzene	mg/l	0.0466	0	.05	93.2	35-147	L581196-02	WG598901
Ethylbenzene	mg/l	0.0510	0	.05	102.	39-141	L581196-02	WG598901
Toluene	mg/l	0.0485	0	.05	96.9	35-148	L581196-02	WG598901
Total Xylene	mg/l	0.156	0	.15	104.	33-151	L581196-02	WG598901
a,a,a-Trifluorotoluene(PID)					103.9	55-122		WG598901
Benzene	mg/l	0.0456	0	.05	91.2	35-147	L581248-15	WG598984
Ethylbenzene	mg/l	0.0511	0	.05	102.	39-141	L581248-15	WG598984
Toluene	mg/l	0.0494	0	.05	98.8	35-148	L581248-15	WG598984
Total Xylene	mg/l	0.154	0	.15	102.	33-151	L581248-15	WG598984
a,a,a-Trifluorotoluene(PID)					109.5	55-122		WG598984
Total Xylene	mg/l	0.139	0	.15	92.9	33-151	L581024-03	WG599228
a,a,a-Trifluorotoluene(PID)					101.7	55-122		WG599228

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0469	0.0460	92.8	35-147	2.07	20	L581248-03	WG598921
Ethylbenzene	mg/l	0.0485	0.0485	97.0	39-141	0.0400	20	L581248-03	WG598921
Toluene	mg/l	0.0465	0.0465	93.1	35-148	0.180	20	L581248-03	WG598921
Total Xylene	mg/l	0.146	0.146	97.5	33-151	0.110	20	L581248-03	WG598921
a,a,a-Trifluorotoluene(PID)				105.8	55-122				WG598921
Benzene	mg/l	0.0459	0.0466	91.8	35-147	1.47	20	L581196-02	WG598901
Ethylbenzene	mg/l	0.0501	0.0510	100.	39-141	1.82	20	L581196-02	WG598901
Toluene	mg/l	0.0475	0.0485	94.9	35-148	2.09	20	L581196-02	WG598901
Total Xylene	mg/l	0.154	0.156	102.	33-151	1.51	20	L581196-02	WG598901
a,a,a-Trifluorotoluene(PID)				104.0	55-122				WG598901

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/l	0.0431	0.0456	86.2	35-147	5.62	20	L581248-15	WG598984
Ethylbenzene	mg/l	0.0483	0.0511	96.5	39-141	5.66	20	L581248-15	WG598984
Toluene	mg/l	0.0471	0.0494	94.2	35-148	4.79	20	L581248-15	WG598984
Total Xylene	mg/l	0.145	0.154	96.8	33-151	5.76	20	L581248-15	WG598984
a,a,a-Trifluorotoluene(PID)				110.6	55-122				WG598984
Total Xylene	mg/l	0.137	0.139	91.2	33-151	1.83	20	L581024-03	WG599228
a,a,a-Trifluorotoluene(PID)				101.6	55-122				WG599228

Batch number /Run number / Sample number cross reference

WG598921: R2221354: L581248-03 04 05 06 07 08 09 10 11 12 13 14
WG598901: R2221973: L581248-01 02
WG598984: R2222734: L581248-15 16 17 18 19 20
WG599228: R2224353: L581248-02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates- Grand Junction, CO
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Grand Junction, CO 81505

Report Summary

Monday July 23, 2012

Report Number: L585802

Samples Received: 07/19/12

Client Project: 010-1708

Description: OXY YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : OXY-DG1

Collected By : J. Sutrina
Collection Date : 07/18/12 10:15

ESC Sample # : L585802-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	07/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Est. 1970

REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : P4

Collected By : J. Sutrina
Collection Date : 07/18/12 10:55

ESC Sample # : L585802-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0016	0.00050	mg/l	8021B	07/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/19/12	1
Ethylbenzene	0.0016	0.00050	mg/l	8021B	07/19/12	1
Total Xylene	0.046	0.0015	mg/l	8021B	07/19/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	07/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : P6

Collected By : J. Sutrina
Collection Date : 07/18/12 11:20

ESC Sample # : L585802-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	108.		% Rec.	8021B	07/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : P8

Collected By : J. Sutrina
Collection Date : 07/18/12 11:30

ESC Sample # : L585802-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/19/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/19/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/19/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/19/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	07/19/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : P10

Collected By : J. Sutrina
Collection Date : 07/18/12 11:40

ESC Sample # : L585802-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0010	0.00050	mg/l	8021B	07/20/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/20/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Total Xylene	0.0037	0.0015	mg/l	8021B	07/20/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	07/20/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Olsson Associates- Grand Junction,
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Grand Junction, CO 81505

July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : P9

Collected By : J. Sutrina
Collection Date : 07/18/12 11:50

ESC Sample # : L585802-06

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0044	0.00050	mg/l	8021B	07/20/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/20/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/20/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	07/20/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Tim Dobransky
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Grand Junction, CO 81505

July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : DG1

Collected By : J. Sutrina
Collection Date : 07/18/12 12:05

ESC Sample # : L585802-07

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/20/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/20/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	07/20/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : S12

Collected By : J. Sutrina
Collection Date : 07/18/12 12:05

ESC Sample # : L585802-08

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/20/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/20/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	07/20/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
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July 23, 2012

Date Received : July 19, 2012
Description : OXY YT Ranch 17-5

Sample ID : S11

Collected By : J. Sutrina
Collection Date : 07/18/12 12:10

ESC Sample # : L585802-09

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Toluene	BDL	0.0050	mg/l	8021B	07/20/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	07/20/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	07/20/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021B	07/20/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Summary of Remarks For Samples Printed
07/23/12 at 16:28:47

TSR Signing Reports: 288
R5 - Desired TAT

Log all PAHs as PAHSIM.

Sample: L585802-01 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-02 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-03 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-04 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-05 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-06 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-07 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-08 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28
Sample: L585802-09 Account: OLSSONCO Received: 07/19/12 09:00 Due Date: 07/26/12 00:00 RPT Date: 07/23/12 16:28



YOUR LAB OF CHOICE

Olsson Associates- Grand Junction, CO
Tim Dobransky
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L585802

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July 23, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG603488	07/19/12 17:24
Ethylbenzene	< .0005	mg/l			WG603488	07/19/12 17:24
Toluene	< .005	mg/l			WG603488	07/19/12 17:24
Total Xylene	< .0015	mg/l			WG603488	07/19/12 17:24
a,a,a-Trifluorotoluene(PID)		% Rec.	106.6	55-122	WG603488	07/19/12 17:24

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0510	102.	79-114	WG603488
Ethylbenzene	mg/l	.05	0.0535	107.	80-116	WG603488
Toluene	mg/l	.05	0.0517	103.	79-112	WG603488
Total Xylene	mg/l	.15	0.161	107.	84-118	WG603488
a,a,a-Trifluorotoluene(PID)				107.4	55-122	WG603488

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0509	0.0510	102.	79-114	0.320	20	WG603488
Ethylbenzene	mg/l	0.0524	0.0535	105.	80-116	2.06	20	WG603488
Toluene	mg/l	0.0504	0.0517	101.	79-112	2.54	20	WG603488
Total Xylene	mg/l	0.158	0.161	105.	84-118	1.90	20	WG603488
a,a,a-Trifluorotoluene(PID)				105.9	55-122			WG603488

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0597	0.00920	.05	101.	35-147	L585781-03	WG603488
Ethylbenzene	mg/l	0.0548	0.00240	.05	105.	39-141	L585781-03	WG603488
Toluene	mg/l	0.0700	0.0190	.05	102.	35-148	L585781-03	WG603488
Total Xylene	mg/l	0.173	0.0160	.15	104.	33-151	L585781-03	WG603488
a,a,a-Trifluorotoluene(PID)					106.4	55-122		WG603488

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0596	0.0597	101.	35-147	0.0800	20	L585781-03	WG603488
Ethylbenzene	mg/l	0.0545	0.0548	104.	39-141	0.660	20	L585781-03	WG603488
Toluene	mg/l	0.0693	0.0700	100.	35-148	1.10	20	L585781-03	WG603488
Total Xylene	mg/l	0.172	0.173	104.	33-151	0.620	20	L585781-03	WG603488
a,a,a-Trifluorotoluene(PID)				105.5	55-122				WG603488

Batch number /Run number / Sample number cross reference

WG603488: R2266473: L585802-01 02 03 04 05 06 07 08 09

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Olsson Associates- Grand Junction, CO
Tim Dobransky
826 21 1/2 Road

Grand Junction, CO 81505

Quality Assurance Report
Level II

L585802

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July 23, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates- Grand Junction, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Wednesday August 22, 2012

Report Number: L591091

Samples Received: 08/21/12

Client Project: 010-1708

Description: OXY YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

August 22, 2012

Date Received : August 21, 2012
Description : OXY YT Ranch 17-5

Sample ID : OXY DG1

Collected By : Jessica Sutrina
Collection Date : 08/20/12 11:40

ESC Sample # : L591091-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	08/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	08/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

August 22, 2012

Date Received : August 21, 2012
Description : OXY YT Ranch 17-5

Sample ID : P4

Collected By : Jessica Sutrina
Collection Date : 08/20/12 12:25

ESC Sample # : L591091-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	08/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Total Xylene	0.0020	0.0015	mg/l	8021B	08/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

August 22, 2012

Date Received : August 21, 2012
Description : OXY YT Ranch 17-5

Sample ID : P9

Collected By : Jessica Sutrina
Collection Date : 08/20/12 12:45

ESC Sample # : L591091-03

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0014	0.00050	mg/l	8021B	08/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	08/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	08/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

August 22, 2012

Date Received : August 21, 2012
Description : OXY YT Ranch 17-5

Sample ID : DG1

Collected By : Jessica Sutrina
Collection Date : 08/20/12 13:10

ESC Sample # : L591091-04

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	08/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 08/22/12 15:48 Printed: 08/22/12 15:49



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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

August 22, 2012

Date Received : August 21, 2012
Description : OXY YT Ranch 17-5

Sample ID : S11

Collected By : Jessica Sutrina
Collection Date : 08/20/12 13:15

ESC Sample # : L591091-05

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	08/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	08/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	08/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021B	08/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 08/22/12 15:48 Printed: 08/22/12 15:49

Summary of Remarks For Samples Printed
08/22/12 at 15:49:24

TSR Signing Reports: 288
R5 - Desired TAT

Log all PAHs as PAHSIM.

Sample: L591091-01 Account: OLSSONCO Received: 08/21/12 09:00 Due Date: 08/28/12 00:00 RPT Date: 08/22/12 15:48

Sample: L591091-02 Account: OLSSONCO Received: 08/21/12 09:00 Due Date: 08/28/12 00:00 RPT Date: 08/22/12 15:48

Sample: L591091-03 Account: OLSSONCO Received: 08/21/12 09:00 Due Date: 08/28/12 00:00 RPT Date: 08/22/12 15:48

Sample: L591091-04 Account: OLSSONCO Received: 08/21/12 09:00 Due Date: 08/28/12 00:00 RPT Date: 08/22/12 15:48

Sample: L591091-05 Account: OLSSONCO Received: 08/21/12 09:00 Due Date: 08/28/12 00:00 RPT Date: 08/22/12 15:48



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Olsson Associates- Grand Junction, CO
Tim Dobransky
826 21 1/2 Road

Quality Assurance Report
Level II

Grand Junction, CO 81505

L591091

August 22, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG608774	08/21/12 18:01
Ethylbenzene	< .0005	mg/l			WG608774	08/21/12 18:01
Toluene	< .005	mg/l			WG608774	08/21/12 18:01
Total Xylene	< .0015	mg/l			WG608774	08/21/12 18:01
a,a,a-Trifluorotoluene(PID)		% Rec.	102.4	55-122	WG608774	08/21/12 18:01

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0440	88.0	79-114	WG608774
Ethylbenzene	mg/l	.05	0.0489	97.8	80-116	WG608774
Toluene	mg/l	.05	0.0480	96.0	79-112	WG608774
Total Xylene	mg/l	.15	0.146	97.0	84-118	WG608774
a,a,a-Trifluorotoluene(PID)				102.5	55-122	WG608774

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0452	0.0440	90.0	79-114	2.85	20	WG608774
Ethylbenzene	mg/l	0.0496	0.0489	99.0	80-116	1.50	20	WG608774
Toluene	mg/l	0.0486	0.0480	97.0	79-112	1.33	20	WG608774
Total Xylene	mg/l	0.148	0.146	99.0	84-118	1.65	20	WG608774
a,a,a-Trifluorotoluene(PID)				100.9	55-122			WG608774

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0441	0	.05	88.2	35-147	L591042-01	WG608774
Ethylbenzene	mg/l	0.0483	0	.05	96.7	39-141	L591042-01	WG608774
Toluene	mg/l	0.0478	0	.05	95.5	35-148	L591042-01	WG608774
Total Xylene	mg/l	0.144	0	.15	95.9	33-151	L591042-01	WG608774
a,a,a-Trifluorotoluene(PID)					101.3	55-122		WG608774

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0447	0.0441	89.3	35-147	1.27	20	L591042-01	WG608774
Ethylbenzene	mg/l	0.0496	0.0483	99.2	39-141	2.56	20	L591042-01	WG608774
Toluene	mg/l	0.0488	0.0478	97.6	35-148	2.14	20	L591042-01	WG608774
Total Xylene	mg/l	0.147	0.144	98.0	33-151	2.21	20	L591042-01	WG608774
a,a,a-Trifluorotoluene(PID)				102.1	55-122				WG608774

Batch number /Run number / Sample number cross reference

WG608774: R2312114: L591091-01 02 03 04 05

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report
Level II

L591091

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August 22, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates- Grand Junction, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Monday September 17, 2012

Report Number: L595155

Samples Received: 09/14/12

Client Project: 010-1708

Description: OXY YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

September 17, 2012

Date Received : September 14, 2012
Description : OXY YT Ranch 17-5

Sample ID : OXY DG1

Collected By : J. Surina
Collection Date : 09/13/12 11:00

ESC Sample # : L595155-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/16/12	1
Toluene	BDL	0.0050	mg/l	8021B	09/16/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	09/16/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	09/16/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	09/16/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 09/17/12 15:22 Printed: 09/17/12 15:22



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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

September 17, 2012

Date Received : September 14, 2012
Description : Oxy YT Ranch 17-5

Sample ID : P4

Collected By : J. Surina
Collection Date : 09/13/12 11:30

ESC Sample # : L595155-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	09/16/12	1
Toluene	BDL	0.0050	mg/l	8021B	09/16/12	1
Ethylbenzene	0.00054	0.00050	mg/l	8021B	09/16/12	1
Total Xylene	0.010	0.0015	mg/l	8021B	09/16/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	09/16/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 09/17/12 15:22 Printed: 09/17/12 15:22

Summary of Remarks For Samples Printed
09/17/12 at 15:22:25

TSR Signing Reports: 288
R5 - Desired TAT

Log all PAHs as PAHSIM.

Sample: L595155-01 Account: OLSSONCO Received: 09/14/12 09:45 Due Date: 09/21/12 00:00 RPT Date: 09/17/12 15:22

Sample: L595155-02 Account: OLSSONCO Received: 09/14/12 09:45 Due Date: 09/21/12 00:00 RPT Date: 09/17/12 15:22



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Olsson Associates- Grand Junction, CO
Tim Dobransky
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Quality Assurance Report
Level II

Grand Junction, CO 81505

L595155

September 17, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG612714	09/15/12 23:41
Ethylbenzene	< .0005	mg/l			WG612714	09/15/12 23:41
Toluene	< .005	mg/l			WG612714	09/15/12 23:41
Total Xylene	< .0015	mg/l			WG612714	09/15/12 23:41
a,a,a-Trifluorotoluene(PID)		% Rec.	105.2	55-122	WG612714	09/15/12 23:41

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0501	100.	79-114	WG612714
Ethylbenzene	mg/l	.05	0.0530	106.	80-116	WG612714
Toluene	mg/l	.05	0.0525	105.	79-112	WG612714
Total Xylene	mg/l	.15	0.158	105.	84-118	WG612714
a,a,a-Trifluorotoluene(PID)				102.5	55-122	WG612714

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0475	0.0501	95.0	79-114	5.26	20	WG612714
Ethylbenzene	mg/l	0.0506	0.0530	101.	80-116	4.61	20	WG612714
Toluene	mg/l	0.0503	0.0525	101.	79-112	4.29	20	WG612714
Total Xylene	mg/l	0.149	0.158	99.0	84-118	5.68	20	WG612714
a,a,a-Trifluorotoluene(PID)				102.9	55-122			WG612714

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0514	0	.05	103.	35-147	L595205-04	WG612714
Ethylbenzene	mg/l	0.0548	0	.05	110.	39-141	L595205-04	WG612714
Toluene	mg/l	0.0547	0	.05	109.	35-148	L595205-04	WG612714
Total Xylene	mg/l	0.163	0	.15	109.	33-151	L595205-04	WG612714
a,a,a-Trifluorotoluene(PID)					103.6	55-122		WG612714

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0500	0.0514	100.	35-147	2.71	20	L595205-04	WG612714
Ethylbenzene	mg/l	0.0529	0.0548	106.	39-141	3.47	20	L595205-04	WG612714
Toluene	mg/l	0.0529	0.0547	106.	35-148	3.39	20	L595205-04	WG612714
Total Xylene	mg/l	0.157	0.163	105.	33-151	3.86	20	L595205-04	WG612714
a,a,a-Trifluorotoluene(PID)				103.5	55-122				WG612714

Batch number /Run number / Sample number cross reference

WG612714: R2348695: L595155-01 02

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report
Level II

L595155

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September 17, 2012

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Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates- Grand Junction, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Wednesday October 24, 2012

Report Number: L602088

Samples Received: 10/20/12

Client Project: 010-1708

Description: OXY YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
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October 24, 2012

Date Received : October 20, 2012
Description : OXY YT Ranch 17-5
Sample ID : OXY DG1
Collected By : TLC
Collection Date : 10/19/12 10:30

ESC Sample # : L602088-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	10/24/12	1
Toluene	BDL	0.0050	mg/l	8021B	10/24/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	10/24/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	10/24/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	111.		% Rec.	8021B	10/24/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 10/24/12 14:58 Printed: 10/24/12 14:58

Summary of Remarks For Samples Printed
10/24/12 at 14:58:49

TSR Signing Reports: 288
R5 - Desired TAT

Log all PAHs as PAHSIM.

Sample: L602088-01 Account: OLSSONCO Received: 10/20/12 10:00 Due Date: 10/26/12 00:00 RPT Date: 10/24/12 14:58



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Quality Assurance Report
Level II

L602088

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Est. 1970

October 24, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG619031	10/24/12 02:21
Ethylbenzene	< .0005	mg/l			WG619031	10/24/12 02:21
Toluene	< .005	mg/l			WG619031	10/24/12 02:21
Total Xylene	< .0015	mg/l			WG619031	10/24/12 02:21
a,a,a-Trifluorotoluene(PID)		% Rec.	109.2	55-122	WG619031	10/24/12 02:21

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0493	98.6	79-114	WG619031
Ethylbenzene	mg/l	.05	0.0543	109.	80-116	WG619031
Toluene	mg/l	.05	0.0519	104.	79-112	WG619031
Total Xylene	mg/l	.15	0.161	107.	84-118	WG619031
a,a,a-Trifluorotoluene(PID)				109.1	55-122	WG619031

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0508	0.0493	102.	79-114	2.88	20	WG619031
Ethylbenzene	mg/l	0.0554	0.0543	111.	80-116	2.10	20	WG619031
Toluene	mg/l	0.0530	0.0519	106.	79-112	2.04	20	WG619031
Total Xylene	mg/l	0.165	0.161	110.	84-118	2.17	20	WG619031
a,a,a-Trifluorotoluene(PID)				109.2	55-122			WG619031

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0482	0	.05	96.4	35-147	L602067-01	WG619031
Ethylbenzene	mg/l	0.0538	0	.05	108.	39-141	L602067-01	WG619031
Toluene	mg/l	0.0513	0	.05	102.	35-148	L602067-01	WG619031
Total Xylene	mg/l	0.159	0	.15	106.	33-151	L602067-01	WG619031
a,a,a-Trifluorotoluene(PID)					109.6	55-122		WG619031

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0473	0.0482	94.6	35-147	1.93	20	L602067-01	WG619031
Ethylbenzene	mg/l	0.0535	0.0538	107.	39-141	0.540	20	L602067-01	WG619031
Toluene	mg/l	0.0507	0.0513	101.	35-148	1.24	20	L602067-01	WG619031
Total Xylene	mg/l	0.158	0.159	105.	33-151	0.500	20	L602067-01	WG619031
a,a,a-Trifluorotoluene(PID)				111.4	55-122				WG619031

Batch number /Run number / Sample number cross reference

WG619031: R2405837: L602088-01

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Tim Dobransky
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Quality Assurance Report
Level II

L602088

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October 24, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Monday November 26, 2012

Report Number: L607199

Samples Received: 11/20/12

Client Project: 010-1708

Description: Oxy YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

November 26, 2012

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

Date Received : November 20, 2012
Description : Oxy YT Ranch 17-5
Sample ID : OXY DG1
Collected By : TC
Collection Date : 11/19/12 11:50

ESC Sample # : L607199-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	11/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	11/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	11/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	11/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	11/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/26/12 11:43 Printed: 11/26/12 11:44



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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates - GJ, CO
826 21 1/2 Road
Grand Junction, CO 81505

November 26, 2012

Date Received : November 20, 2012
Description : Oxy YT Ranch 17-5
Sample ID : PLG
Collected By : TC
Collection Date : 11/19/12 12:35

ESC Sample # : L607199-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	11/22/12	1
Toluene	BDL	0.0050	mg/l	8021B	11/22/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	11/22/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	11/22/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021B	11/22/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/26/12 11:43 Printed: 11/26/12 11:44

Summary of Remarks For Samples Printed
11/26/12 at 11:44:01

TSR Signing Reports: 288
R5 - Desired TAT

DO NOT USE THIS COCODE LOG TO **OLSSONCO**

Sample: L607199-01 Account: CORCOMGCO Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/26/12 11:43

Sample: L607199-02 Account: CORCOMGCO Received: 11/20/12 09:00 Due Date: 11/28/12 00:00 RPT Date: 11/26/12 11:43



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Olsson Associates - GJ, CO
Tim Dobransky
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Level II

L607199

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November 26, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG624520	11/22/12 16:15
Ethylbenzene	< .0005	mg/l			WG624520	11/22/12 16:15
Toluene	< .005	mg/l			WG624520	11/22/12 16:15
Total Xylene	< .0015	mg/l			WG624520	11/22/12 16:15
a,a,a-Trifluorotoluene(PID)		% Rec.	108.4	55-122	WG624520	11/22/12 16:15

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0508	102.	79-114	WG624520
Ethylbenzene	mg/l	.05	0.0533	107.	80-116	WG624520
Toluene	mg/l	.05	0.0519	104.	79-112	WG624520
Total Xylene	mg/l	.15	0.161	107.	84-118	WG624520
a,a,a-Trifluorotoluene(PID)				106.2	55-122	WG624520

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0512	0.0508	102.	79-114	0.730	20	WG624520
Ethylbenzene	mg/l	0.0546	0.0533	109.	80-116	2.34	20	WG624520
Toluene	mg/l	0.0527	0.0519	105.	79-112	1.64	20	WG624520
Total Xylene	mg/l	0.165	0.161	110.	84-118	2.29	20	WG624520
a,a,a-Trifluorotoluene(PID)				107.6	55-122			WG624520

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0534	0	.05	107.	35-147	L607199-01	WG624520
Ethylbenzene	mg/l	0.0565	0	.05	113.	39-141	L607199-01	WG624520
Toluene	mg/l	0.0550	0	.05	110.	35-148	L607199-01	WG624520
Total Xylene	mg/l	0.170	0	.15	114.	33-151	L607199-01	WG624520
a,a,a-Trifluorotoluene(PID)					109.1	55-122		WG624520

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0536	0.0534	107.	35-147	0.480	20	L607199-01	WG624520
Ethylbenzene	mg/l	0.0565	0.0565	113.	39-141	0.0100	20	L607199-01	WG624520
Toluene	mg/l	0.0550	0.0550	110.	35-148	0.140	20	L607199-01	WG624520
Total Xylene	mg/l	0.170	0.170	114.	33-151	0.0300	20	L607199-01	WG624520
a,a,a-Trifluorotoluene(PID)				107.6	55-122				WG624520

Batch number /Run number / Sample number cross reference

WG624520: R2453657: L607199-01 02

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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November 26, 2012

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Tim Dobransky
Olsson Associates- Grand Junction, CO
826 21 1/2 Road
Grand Junction, CO 81505

Report Summary

Friday December 07, 2012

Report Number: L609039

Samples Received: 12/04/12

Client Project: 010-1708

Description: OXY YT Ranch 17-5

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

December 07, 2012

Date Received : December 04, 2012
Description : OXY YT Ranch 17-5
Sample ID : OXYDG1
Collected By : TLC
Collection Date : 12/03/12 08:32

ESC Sample # : L609039-01

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/06/12	1
Toluene	BDL	0.0050	mg/l	8021B	12/06/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/06/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/06/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	12/06/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 12/07/12 14:29 Printed: 12/07/12 15:07



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REPORT OF ANALYSIS

Tim Dobransky
Olsson Associates- Grand Junction,
826 21 1/2 Road
Grand Junction, CO 81505

December 07, 2012

Date Received : December 04, 2012
Description : OXY Tranch
Sample ID : P9
Collected By : TLC
Collection Date : 12/03/12 09:30

ESC Sample # : L609039-02

Site ID :

Project # : 010-1708

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	12/06/12	1
Toluene	BDL	0.0050	mg/l	8021B	12/06/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	12/06/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	12/06/12	1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	12/06/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 12/07/12 14:29 Printed: 12/07/12 15:07



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December 07, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/l			WG626431	12/06/12 11:17
Ethylbenzene	< .0005	mg/l			WG626431	12/06/12 11:17
Toluene	< .005	mg/l			WG626431	12/06/12 11:17
Total Xylene	< .0015	mg/l			WG626431	12/06/12 11:17
a,a,a-Trifluorotoluene(PID)		% Rec.	102.6	55-122	WG626431	12/06/12 11:17

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/l	.05	0.0490	97.9	79-114	WG626431
Ethylbenzene	mg/l	.05	0.0519	104.	80-116	WG626431
Toluene	mg/l	.05	0.0505	101.	79-112	WG626431
Total Xylene	mg/l	.15	0.153	102.	84-118	WG626431
a,a,a-Trifluorotoluene(PID)				101.4	55-122	WG626431

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/l	0.0530	0.0490	106.	79-114	8.01	20	WG626431
Ethylbenzene	mg/l	0.0557	0.0519	111.	80-116	6.95	20	WG626431
Toluene	mg/l	0.0540	0.0505	108.	79-112	6.70	20	WG626431
Total Xylene	mg/l	0.164	0.153	110.	84-118	6.84	20	WG626431
a,a,a-Trifluorotoluene(PID)				100.7	55-122			WG626431

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	0.0464	0	.05	92.9	35-147	L609039-01	WG626431
Ethylbenzene	mg/l	0.0492	0	.05	98.4	39-141	L609039-01	WG626431
Toluene	mg/l	0.0478	0	.05	95.5	35-148	L609039-01	WG626431
Total Xylene	mg/l	0.145	0	.15	96.6	33-151	L609039-01	WG626431
a,a,a-Trifluorotoluene(PID)					101.4	55-122		WG626431

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	0.0512	0.0464	102.	35-147	9.78	20	L609039-01	WG626431
Ethylbenzene	mg/l	0.0537	0.0492	108.	39-141	8.86	20	L609039-01	WG626431
Toluene	mg/l	0.0521	0.0478	104.	35-148	8.72	20	L609039-01	WG626431
Total Xylene	mg/l	0.159	0.145	106.	33-151	9.10	20	L609039-01	WG626431
a,a,a-Trifluorotoluene(PID)				100.9	55-122				WG626431

Batch number /Run number / Sample number cross reference

WG626431: R2468758: L609039-01 02

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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SOIL ATTACHMENTS

Spoil Characterization

Pad #:	MWR 17-5
Sample Date:	9/5/2012
Clearance Achieved Date:	

Sample Identifications (mg/kg)							
Lab Report #	L593626	L593626	L593626	L593626	L593626	L593626	L593626
Sample Date	9/5/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012
Sample Type	Spoil Characterization	Spoil Characterization	Spoil Characterization	Spoil Characterization	Spoil Characterization	Spoil Characterization	Spoil Characterization
Sample ID	MWR-17-5-Spoil-SW 5 FT	MWR-17-5-Spoil-NW 2.5 FT	MWR-17-5-Spoil-North 3 FT	MWR-17-5-Spoil-East 4 FT	MWR-17-5-Spoil-ECenter 4.5 FT	MWR-17-5-Spoil-WCenter 3 FT	
Organics in Soil	MCL (mg/kg)						
TPH (GRO and DRO)	500	7.3	3.7	12.0	5.9	7.6	7.5
Benzene	0.17	U	U	U	U	U	U
Toluene	85	U	U	U	U	U	U
Ethylbenzene	100	U	U	U	U	U	U
Xylenes	175	U	U	U	U	U	U
Organics in Soil (PAH's)							
Acenaphthene	1000	U	U	U	U	0.00073	U
Anthracene	1000	U	U	0.00076	U	U	U
Benzo(A)anthracene	0.22	0.0011	U	0.0013	0.001	0.001	0.001
Benzo(B)fluoranthene	0.22	0.0012	U	U	U	U	U
Benzo(K)fluoranthene	2.2	U	U	U	U	U	U
Benzo(A)pyrene	0.022	0.0017	0.0013	0.0012	0.001	0.0012	0.0013
Chrysene	22	U	U	U	U	U	U
Dibenzo(A,H)anthracene	0.022	U	U	U	U	U	U
Fluoranthene	1000	U	U	U	U	U	U
Flourene	1000	0.0012	U	0.0024	0.0012	0.002	0.00078
Indeno(1,2,3,C,D)pyrene	0.22	U	U	U	U	U	U
Napthalene	23	0.0012	U	0.0027	0.0027	0.001	U
Pyrene	1000	U	U	0.00062	U	U	U
Inorganics in Soil							
EC	<4 mmhos/cm or 2X background	0.450	0.190	0.110	0.240	0.230	0.620
SAR	<12	0.9	1.2	0.77	1.10	0.77	1.20
pH	6-9	7.9	8.1	8.1	8.2	8.1	8
Metals in Soils							
Arsenic	0.39	U	U	U	U	U	U
Barium	15000	130	110	120	270	120	140
Cadmium	70	U	U	U	U	U	U
Chromium	12000	20.0	U	U	18.0	U	21.0
Chromium VI	23	U	U	U	U	U	U
Copper	3100	15.0	15.0	14.0	16.0	15.0	16.0
Lead	400	8.5	8.6	8.2	9.7	7.9	9.3
Mercury	23	0.014	0.012	0.014	0.015	0.013	0.016
Nickel	1600	19.0	18.0	17.0	16.0	18.0	18.0
Selenium	390	U	U	U	U	U	U
Silver	390	U	U	U	U	U	U
Zinc	23000	51.0	50.0	48.0	49.0	45.0	50.0



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Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Friday September 14, 2012

Report Number: L593623

Samples Received: 09/06/12

Client Project:

Description: MWR 17-5-Spoil Characterization

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

Sample ID : MWR-17-5-SPOIL-SW 5 FT

Collected By : Chris Bak
Collection Date : 09/05/12 11:47

ESC Sample # : L593623-01

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium,Hexavalent	U	6.4	20.	mg/kg	O	3060A/7	09/12/12	10
Chromium,Trivalent	20.	0.17	20.	mg/kg		Calc.	09/08/12	1
ORP	200			mV		2580	09/09/12	1
pH	7.9			su	T8	9045D	09/11/12	1
Sodium Adsorption Ratio	0.90					Calc.	09/10/12	1
Specific Conductance	450			umhos/cm		9050AMo	09/12/12	1
Mercury	0.014	0.00080	0.020	mg/kg	J	7471	09/07/12	1
Arsenic	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Barium	130	0.050	0.25	mg/kg		6010B	09/08/12	1
Cadmium	U	0.040	0.25	mg/kg		6010B	09/08/12	1
Chromium	20.	0.085	0.50	mg/kg		6010B	09/08/12	1
Copper	15.	0.21	1.0	mg/kg		6010B	09/08/12	1
Lead	8.5	0.090	0.25	mg/kg		6010B	09/08/12	1
Nickel	19.	0.26	1.0	mg/kg		6010B	09/08/12	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Silver	U	0.16	0.50	mg/kg		6010B	09/08/12	1
Zinc	51.	0.34	1.5	mg/kg		6010B	09/08/12	1
TPH (GC/FID) Low Fraction	U	0.11	0.50	mg/kg		8015D/G	09/06/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	90.1			% Rec.		602/801	09/06/12	5
Benzene	U	0.0014	0.0050	mg/kg		8260B	09/07/12	5
Toluene	U	0.0022	0.025	mg/kg		8260B	09/07/12	5
Ethylbenzene	U	0.0015	0.0050	mg/kg		8260B	09/07/12	5
Total Xylenes	U	0.0035	0.015	mg/kg		8260B	09/07/12	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/07/12	5
Dibromofluoromethane	108.			% Rec.		8260B	09/07/12	5
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	09/07/12	5
4-Bromofluorobenzene	105.			% Rec.		8260B	09/07/12	5
TPH (GC/FID) High Fraction	7.3	0.77	4.0	mg/kg		3546/DR	09/13/12	1
Surrogate recovery(%) o-Terphenyl	70.2			% Rec.		3546/DR	09/13/12	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

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Reported: 09/14/12 09:39 Printed: 09/14/12 09:40
L593623-01 (CR6) - diluted due to sample color interference
L593623-01 (PH) - 7.9@22.8c



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

Sample ID : MWR-17-5-SPOIL-SW 5 FT

Collected By : Chris Bak
Collection Date : 09/05/12 11:47

ESC Sample # : L593623-01

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(a)anthracene	0.0011	0.00092	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(a)pyrene	0.0017	0.00062	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(b)fluoranthene	0.0012	0.00082	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	09/09/12	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	09/09/12	1
Fluorene	0.0012	0.00055	0.0060	mg/kg	J	8270C-S	09/09/12	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Naphthalene	0.0012	0.00065	0.0060	mg/kg	J	8270C-S	09/09/12	1
Phenanthrene	0.0022	0.00074	0.0060	mg/kg	J	8270C-S	09/09/12	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
1-Methylnaphthalene	0.0031	0.00079	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Methylnaphthalene	0.0055	0.00059	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	09/09/12	1
Surrogate Recovery								
Nitrobenzene-d5	78.7			% Rec.		8270C-S	09/09/12	1
2-Fluorobiphenyl	83.5			% Rec.		8270C-S	09/09/12	1
p-Terphenyl-d14	94.3			% Rec.		8270C-S	09/09/12	1

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L593623-01 (CR6) - diluted due to sample color interference
L593623-01 (PH) - 7.9@22.8c



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization
Sample ID : MWR-17-5-SPOIL-NW 2.5 FT
Collected By : Chris Bak
Collection Date : 09/05/12 11:53

ESC Sample # : L593623-02

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	6.4	20.	mg/kg	O	3060A/7	09/12/12	10
Chromium, Trivalent	U	0.17	20.	mg/kg	O	Calc.	09/08/12	1
ORP	190			mV		2580	09/09/12	1
pH	8.1			su	T8	9045D	09/11/12	1
Sodium Adsorption Ratio	1.2					Calc.	09/10/12	1
Specific Conductance	190			umhos/cm		9050AMo	09/12/12	1
Mercury	0.012	0.00080	0.020	mg/kg	J	7471	09/07/12	1
Arsenic	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Barium	110	0.050	0.25	mg/kg		6010B	09/08/12	1
Cadmium	U	0.040	0.25	mg/kg		6010B	09/08/12	1
Chromium	18.	0.085	0.50	mg/kg		6010B	09/08/12	1
Copper	15.	0.21	1.0	mg/kg		6010B	09/08/12	1
Lead	8.6	0.090	0.25	mg/kg		6010B	09/08/12	1
Nickel	18.	0.26	1.0	mg/kg		6010B	09/08/12	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Silver	U	0.16	0.50	mg/kg		6010B	09/08/12	1
Zinc	50.	0.34	1.5	mg/kg		6010B	09/08/12	1
TPH (GC/FID) Low Fraction	U	0.11	0.50	mg/kg		8015D/G	09/07/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	91.3			% Rec.		602/801	09/07/12	5
Benzene	U	0.0014	0.0050	mg/kg		8260B	09/07/12	5
Toluene	U	0.0022	0.025	mg/kg		8260B	09/07/12	5
Ethylbenzene	U	0.0015	0.0050	mg/kg		8260B	09/07/12	5
Total Xylenes	U	0.0035	0.015	mg/kg		8260B	09/07/12	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/07/12	5
Dibromofluoromethane	115.			% Rec.		8260B	09/07/12	5
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	09/07/12	5
4-Bromofluorobenzene	103.			% Rec.		8260B	09/07/12	5
TPH (GC/FID) High Fraction	3.7	0.77	4.0	mg/kg	J	3546/DR	09/13/12	1
Surrogate recovery(%) o-Terphenyl	68.9			% Rec.		3546/DR	09/13/12	1

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L593623-02 (CR6) - diluted due to sample color interference

L593623-02 (PH) - 8.1@22.4c



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

Sample ID : MWR-17-5-SPOIL-NW 2.5 FT

Collected By : Chris Bak
Collection Date : 09/05/12 11:53

ESC Sample # : L593623-02

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(a)pyrene	0.0013	0.00062	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	09/09/12	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	09/09/12	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	09/09/12	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	09/09/12	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	09/09/12	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
1-Methylnaphthalene	0.00080	0.00079	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Methylnaphthalene	0.0012	0.00059	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	09/09/12	1
Surrogate Recovery								
Nitrobenzene-d5	79.0			% Rec.		8270C-S	09/09/12	1
2-Fluorobiphenyl	78.1			% Rec.		8270C-S	09/09/12	1
p-Terphenyl-d14	84.8			% Rec.		8270C-S	09/09/12	1

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L593623-02 (CR6) - diluted due to sample color interference

L593623-02 (PH) - 8.1@22.4c



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

ESC Sample # : L593623-03

Sample ID : MWR-17-5-SPOIL-NORTH 3 FT

Site ID : MWR17-5

Collected By : Chris Bak
Collection Date : 09/05/12 12:02

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	6.4	20.	mg/kg	O	3060A/7	09/12/12	10
Chromium, Trivalent	U	0.17	20.	mg/kg	O	Calc.	09/08/12	1
ORP	180			mV		2580	09/09/12	1
pH	8.1			su	T8	9045D	09/11/12	1
Sodium Adsorption Ratio	0.77					Calc.	09/10/12	1
Specific Conductance	110			umhos/cm		9050AMo	09/12/12	1
Mercury	0.014	0.00080	0.020	mg/kg	J	7471	09/07/12	1
Arsenic	U	0.65	2.0	mg/kg	O	6010B	09/08/12	2
Barium	120	0.050	0.25	mg/kg		6010B	09/08/12	1
Cadmium	U	0.040	0.25	mg/kg		6010B	09/08/12	1
Chromium	18.	0.085	0.50	mg/kg		6010B	09/08/12	1
Copper	14.	0.21	1.0	mg/kg		6010B	09/08/12	1
Lead	8.2	0.090	0.25	mg/kg		6010B	09/08/12	1
Nickel	17.	0.26	1.0	mg/kg		6010B	09/08/12	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Silver	U	0.16	0.50	mg/kg		6010B	09/08/12	1
Zinc	48.	0.34	1.5	mg/kg		6010B	09/08/12	1
TPH (GC/FID) Low Fraction	U	0.11	0.50	mg/kg		8015D/G	09/07/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	91.0			% Rec.		602/801	09/07/12	5
Benzene	U	0.0014	0.0050	mg/kg		8260B	09/07/12	5
Toluene	U	0.0022	0.025	mg/kg		8260B	09/07/12	5
Ethylbenzene	U	0.0015	0.0050	mg/kg		8260B	09/07/12	5
Total Xylenes	U	0.0035	0.015	mg/kg		8260B	09/07/12	5
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	09/07/12	5
Dibromofluoromethane	112.			% Rec.		8260B	09/07/12	5
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	09/07/12	5
4-Bromofluorobenzene	108.			% Rec.		8260B	09/07/12	5
TPH (GC/FID) High Fraction	12.	0.77	4.0	mg/kg		3546/DR	09/13/12	1
Surrogate recovery(%) o-Terphenyl	71.8			% Rec.		3546/DR	09/13/12	1

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L593623-03 (PH) - 8.1@22.4c

L593623-03 (CR6) - diluted due to sample color interference



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

Sample ID : MWR-17-5-SPOIL-NORTH 3 FT

Collected By : Chris Bak
Collection Date : 09/05/12 12:02

ESC Sample # : L593623-03

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.00076	0.00076	0.0060	mg/kg	J	8270C-S	09/09/12	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(a)anthracene	0.0013	0.00092	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(a)pyrene	0.0012	0.00062	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(g,h,i)perylene	0.0014	0.0012	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	09/09/12	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	09/09/12	1
Fluorene	0.0024	0.00055	0.0060	mg/kg	J	8270C-S	09/09/12	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Naphthalene	0.0027	0.00065	0.0060	mg/kg	J	8270C-S	09/09/12	1
Phenanthrene	0.0034	0.00074	0.0060	mg/kg	J	8270C-S	09/09/12	1
Pyrene	0.00062	0.00059	0.0060	mg/kg	J	8270C-S	09/09/12	1
1-Methylnaphthalene	0.0034	0.00079	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Methylnaphthalene	0.0096	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	09/09/12	1
Surrogate Recovery								
Nitrobenzene-d5	95.2			% Rec.		8270C-S	09/09/12	1
2-Fluorobiphenyl	89.3			% Rec.		8270C-S	09/09/12	1
p-Terphenyl-d14	98.7			% Rec.		8270C-S	09/09/12	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

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L593623-03 (PH) - 8.1@22.4c

L593623-03 (CR6) - diluted due to sample color interference



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

ESC Sample # : L593623-04

Sample ID : MWR-17-5-SPOIL-EAST 4 FT

Site ID : MWR17-5

Collected By : Chris Bak
Collection Date : 09/05/12 12:12

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	3.2	10.	mg/kg	O	3060A/7	09/12/12	5
Chromium, Trivalent	18.	0.17	10.	mg/kg		Calc.	09/08/12	1
ORP	180			mV		2580	09/09/12	1
pH	8.2			su	T8	9045D	09/11/12	1
Sodium Adsorption Ratio	1.1					Calc.	09/10/12	1
Specific Conductance	240			umhos/cm		9050AMo	09/12/12	1
Mercury	0.015	0.00080	0.020	mg/kg	J	7471	09/07/12	1
Arsenic	U	0.65	2.0	mg/kg	O	6010B	09/08/12	2
Barium	270	0.050	0.25	mg/kg		6010B	09/08/12	1
Cadmium	U	0.040	0.25	mg/kg		6010B	09/08/12	1
Chromium	18.	0.085	0.50	mg/kg		6010B	09/08/12	1
Copper	16.	0.21	1.0	mg/kg		6010B	09/08/12	1
Lead	9.7	0.090	0.25	mg/kg		6010B	09/08/12	1
Nickel	16.	0.26	1.0	mg/kg		6010B	09/08/12	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Silver	U	0.16	0.50	mg/kg		6010B	09/08/12	1
Zinc	49.	0.34	1.5	mg/kg		6010B	09/08/12	1
TPH (GC/FID) Low Fraction	U	0.11	0.50	mg/kg		8015D/G	09/06/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	102.			% Rec.		602/801	09/06/12	5
Benzene	U	0.0014	0.0050	mg/kg		8260B	09/07/12	5
Toluene	U	0.0022	0.025	mg/kg		8260B	09/07/12	5
Ethylbenzene	U	0.0015	0.0050	mg/kg		8260B	09/07/12	5
Total Xylenes	U	0.0035	0.015	mg/kg		8260B	09/07/12	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	09/07/12	5
Dibromofluoromethane	110.			% Rec.		8260B	09/07/12	5
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	09/07/12	5
4-Bromofluorobenzene	105.			% Rec.		8260B	09/07/12	5
TPH (GC/FID) High Fraction	5.9	0.77	4.0	mg/kg		3546/DR	09/13/12	1
Surrogate recovery (%) o-Terphenyl	67.6			% Rec.		3546/DR	09/13/12	1

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L593623-04 (PH) - 8.2@21.9c

L593623-04 (CR6) - diluted due to sample color interference



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

Sample ID : MWR-17-5-SPOIL-EAST 4 FT

Collected By : Chris Bak
Collection Date : 09/05/12 12:12

ESC Sample # : L593623-04

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(a)anthracene	0.0010	0.00092	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(a)pyrene	0.0010	0.00062	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	09/09/12	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	09/09/12	1
Fluorene	0.0012	0.00055	0.0060	mg/kg	J	8270C-S	09/09/12	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Naphthalene	0.0027	0.00065	0.0060	mg/kg	J	8270C-S	09/09/12	1
Phenanthrene	0.0023	0.00074	0.0060	mg/kg	J	8270C-S	09/09/12	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
1-Methylnaphthalene	0.0041	0.00079	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Methylnaphthalene	0.0090	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	09/09/12	1
Surrogate Recovery								
Nitrobenzene-d5	93.9			% Rec.		8270C-S	09/09/12	1
2-Fluorobiphenyl	94.1			% Rec.		8270C-S	09/09/12	1
p-Terphenyl-d14	107.			% Rec.		8270C-S	09/09/12	1

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L593623-04 (PH) - 8.2@21.9c

L593623-04 (CR6) - diluted due to sample color interference



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization
Sample ID : MWR-17-5-SPOIL-ECENTER 4.5 FT
Collected By : Chris Bak
Collection Date : 09/05/12 12:21

ESC Sample # : L593623-05

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium,Hexavalent	U	6.4	20.	mg/kg	O	3060A/7	09/12/12	10
Chromium,Trivalent	U	0.17	20.	mg/kg	O	Calc.	09/08/12	1
ORP	190			mV		2580	09/09/12	1
pH	8.1			su	T8	9045D	09/11/12	1
Sodium Adsorption Ratio	0.77					Calc.	09/10/12	1
Specific Conductance	230			umhos/cm		9050AMo	09/12/12	1
Mercury	0.013	0.00080	0.020	mg/kg	J	7471	09/07/12	1
Arsenic	U	0.65	2.0	mg/kg	O	6010B	09/08/12	2
Barium	120	0.050	0.25	mg/kg		6010B	09/08/12	1
Cadmium	U	0.040	0.25	mg/kg		6010B	09/08/12	1
Chromium	17.	0.085	0.50	mg/kg		6010B	09/08/12	1
Copper	15.	0.21	1.0	mg/kg		6010B	09/08/12	1
Lead	7.9	0.090	0.25	mg/kg		6010B	09/08/12	1
Nickel	18.	0.26	1.0	mg/kg		6010B	09/08/12	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Silver	U	0.16	0.50	mg/kg		6010B	09/08/12	1
Zinc	45.	0.34	1.5	mg/kg		6010B	09/08/12	1
TPH (GC/FID) Low Fraction	U	0.11	0.50	mg/kg		8015D/G	09/06/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	101.			% Rec.		602/801	09/06/12	5
Benzene	U	0.0014	0.0050	mg/kg		8260B	09/07/12	5
Toluene	U	0.0022	0.025	mg/kg		8260B	09/07/12	5
Ethylbenzene	U	0.0015	0.0050	mg/kg		8260B	09/07/12	5
Total Xylenes	U	0.0035	0.015	mg/kg		8260B	09/07/12	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/07/12	5
Dibromofluoromethane	110.			% Rec.		8260B	09/07/12	5
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	09/07/12	5
4-Bromofluorobenzene	109.			% Rec.		8260B	09/07/12	5
TPH (GC/FID) High Fraction	7.6	0.77	4.0	mg/kg		3546/DR	09/13/12	1
Surrogate recovery(%) o-Terphenyl	64.3			% Rec.		3546/DR	09/13/12	1

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L593623-05 (CR6) - diluted due to sample color interference

L593623-05 (PH) - 8.1@21.9c



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization
Sample ID : MWR-17-5-SPOIL-ECENTER 4.5 FT
Collected By : Chris Bak
Collection Date : 09/05/12 12:21

ESC Sample # : L593623-05

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthene	0.00073	0.00071	0.0060	mg/kg	J	8270C-S	09/09/12	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(a)anthracene	0.0010	0.00092	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(a)pyrene	0.0012	0.00062	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	09/09/12	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	09/09/12	1
Fluorene	0.0020	0.00055	0.0060	mg/kg	J	8270C-S	09/09/12	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Naphthalene	0.0010	0.00065	0.0060	mg/kg	J	8270C-S	09/09/12	1
Phenanthrene	0.0019	0.00074	0.0060	mg/kg	J	8270C-S	09/09/12	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
1-Methylnaphthalene	0.0034	0.00079	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Methylnaphthalene	0.0077	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	09/09/12	1
Surrogate Recovery								
Nitrobenzene-d5	84.1			% Rec.		8270C-S	09/09/12	1
2-Fluorobiphenyl	76.5			% Rec.		8270C-S	09/09/12	1
p-Terphenyl-d14	79.1			% Rec.		8270C-S	09/09/12	1

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L593623-05 (CR6) - diluted due to sample color interference

L593623-05 (PH) - 8.1@21.9c



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization
Sample ID : MWR-17-5-SPOIL-WCENTER 3 FT
Collected By : Chris Bak
Collection Date : 09/05/12 12:32

ESC Sample # : L593623-06

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium,Hexavalent	U	6.4	20.	mg/kg	O	3060A/7	09/12/12	10
Chromium,Trivalent	21.	0.17	20.	mg/kg		Calc.	09/08/12	1
ORP	190			mV		2580	09/09/12	1
pH	8.0			su	T8	9045D	09/11/12	1
Sodium Adsorption Ratio	1.2					Calc.	09/10/12	1
Specific Conductance	620			umhos/cm		9050AMo	09/13/12	1
Mercury	0.016	0.00080	0.020	mg/kg	J	7471	09/07/12	1
Arsenic	U	1.6	5.0	mg/kg	O	6010B	09/08/12	5
Barium	140	0.050	0.25	mg/kg		6010B	09/08/12	1
Cadmium	U	0.040	0.25	mg/kg		6010B	09/08/12	1
Chromium	21.	0.085	0.50	mg/kg		6010B	09/08/12	1
Copper	16.	0.21	1.0	mg/kg		6010B	09/08/12	1
Lead	9.3	0.090	0.25	mg/kg		6010B	09/08/12	1
Nickel	18.	0.26	1.0	mg/kg		6010B	09/08/12	1
Selenium	U	3.2	10.	mg/kg	O	6010B	09/08/12	10
Silver	U	0.16	0.50	mg/kg		6010B	09/08/12	1
Zinc	50.	0.34	1.5	mg/kg		6010B	09/08/12	1
TPH (GC/FID) Low Fraction	U	0.11	0.50	mg/kg		8015D/G	09/06/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	101.			% Rec.		602/801	09/06/12	5
Benzene	U	0.0014	0.0050	mg/kg		8260B	09/07/12	5
Toluene	U	0.0022	0.025	mg/kg		8260B	09/07/12	5
Ethylbenzene	U	0.0015	0.0050	mg/kg		8260B	09/07/12	5
Total Xylenes	U	0.0035	0.015	mg/kg		8260B	09/07/12	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	09/07/12	5
Dibromofluoromethane	113.			% Rec.		8260B	09/07/12	5
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	09/07/12	5
4-Bromofluorobenzene	105.			% Rec.		8260B	09/07/12	5
TPH (GC/FID) High Fraction	7.5	0.77	4.0	mg/kg		3546/DR	09/13/12	1
Surrogate recovery(%) o-Terphenyl	69.7			% Rec.		3546/DR	09/13/12	1

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L593623-06 (PH) - 8.0@21.9c

L593623-06 (CR6) - diluted due to sample color interference



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REPORT OF ANALYSIS

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 14, 2012

Date Received : September 06, 2012
Description : MWR 17-5-Spoil Characterization

Sample ID : MWR-17-5-SPOIL-WCENTER 3 FT

Collected By : Chris Bak
Collection Date : 09/05/12 12:32

ESC Sample # : L593623-06

Site ID : MWR17-5

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	09/09/12	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(a)anthracene	0.0010	0.00092	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(a)pyrene	0.0013	0.00062	0.0060	mg/kg	J	8270C-S	09/09/12	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	09/09/12	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	09/09/12	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	09/09/12	1
Fluorene	0.00078	0.00055	0.0060	mg/kg	J	8270C-S	09/09/12	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	09/09/12	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	09/09/12	1
Phenanthrene	0.0010	0.00074	0.0060	mg/kg	J	8270C-S	09/09/12	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	09/09/12	1
1-Methylnaphthalene	0.00097	0.00079	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Methylnaphthalene	0.0023	0.00059	0.0060	mg/kg	J	8270C-S	09/09/12	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	09/09/12	1
Surrogate Recovery								
Nitrobenzene-d5	85.9			% Rec.		8270C-S	09/09/12	1
2-Fluorobiphenyl	81.0			% Rec.		8270C-S	09/09/12	1
p-Terphenyl-d14	97.6			% Rec.		8270C-S	09/09/12	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 09/14/12 09:39 Printed: 09/14/12 09:40

L593623-06 (PH) - 8.0@21.9c

L593623-06 (CR6) - diluted due to sample color interference

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L593623-01	WG611319	SAMP	Arsenic	R2335133	O
	WG611319	SAMP	Selenium	R2335133	O
	WG611513	SAMP	Chromium, Hexavalent	R2341214	O
	WG611369	SAMP	Mercury	R2334153	J
	WG611874	SAMP	pH	R2339753	T8
	WG611574	SAMP	Benzo(a)anthracene	R2336713	J
	WG611574	SAMP	Benzo(a)pyrene	R2336713	J
	WG611574	SAMP	Benzo(b)fluoranthene	R2336713	J
	WG611574	SAMP	Fluorene	R2336713	J
	WG611574	SAMP	Naphthalene	R2336713	J
	WG611574	SAMP	Phenanthrene	R2336713	J
	WG611574	SAMP	1-Methylnaphthalene	R2336713	J
	WG611574	SAMP	2-Methylnaphthalene	R2336713	J
L593623-02	WG611319	SAMP	Arsenic	R2335133	O
	WG611319	SAMP	Selenium	R2335133	O
	WG611472	SAMP	TPH (GC/FID) High Fraction	R2337454	J
	WG611513	SAMP	Chromium, Hexavalent	R2341214	O
	WG611369	SAMP	Mercury	R2334153	J
	WG611874	SAMP	pH	R2339753	T8
	WG611574	SAMP	Benzo(a)pyrene	R2336713	J
	WG611574	SAMP	1-Methylnaphthalene	R2336713	J
	WG611574	SAMP	2-Methylnaphthalene	R2336713	J
	WG611319	SAMP	Chromium, Trivalent	R2335133	O
	WG611319	SAMP	Arsenic	R2335133	O
	WG611319	SAMP	Selenium	R2335133	O
L593623-03	WG611513	SAMP	Chromium, Hexavalent	R2341214	O
	WG611369	SAMP	Mercury	R2334153	J
	WG611874	SAMP	pH	R2339753	T8
	WG611574	SAMP	Anthracene	R2336713	J
	WG611574	SAMP	Benzo(a)anthracene	R2336713	J
	WG611574	SAMP	Benzo(a)pyrene	R2336713	J
	WG611574	SAMP	Benzo(g,h,i)perylene	R2336713	J
	WG611574	SAMP	Fluorene	R2336713	J
	WG611574	SAMP	Naphthalene	R2336713	J
	WG611574	SAMP	Phenanthrene	R2336713	J
	WG611574	SAMP	Pyrene	R2336713	J
	WG611574	SAMP	1-Methylnaphthalene	R2336713	J
	WG611319	SAMP	Chromium, Trivalent	R2335133	O
	WG611319	SAMP	Arsenic	R2335133	O
	WG611319	SAMP	Selenium	R2335133	O
	WG611513	SAMP	Chromium, Hexavalent	R2341214	O
L593623-04	WG611369	SAMP	Mercury	R2334153	J
	WG611874	SAMP	pH	R2339753	T8
	WG611574	SAMP	Benzo(a)anthracene	R2336713	J
	WG611574	SAMP	Benzo(a)pyrene	R2336713	J
	WG611574	SAMP	Fluorene	R2336713	J
	WG611574	SAMP	Naphthalene	R2336713	J
	WG611574	SAMP	Phenanthrene	R2336713	J
	WG611574	SAMP	1-Methylnaphthalene	R2336713	J
	WG611319	SAMP	Arsenic	R2335133	O
	WG611319	SAMP	Selenium	R2335133	O
	WG611513	SAMP	Chromium, Hexavalent	R2341214	O
	WG611369	SAMP	Mercury	R2334153	J
L593623-05	WG611874	SAMP	pH	R2339753	T8
	WG611574	SAMP	Acenaphthene	R2336713	J
	WG611574	SAMP	Benzo(a)anthracene	R2336713	J
	WG611574	SAMP	Benzo(a)pyrene	R2336713	J
	WG611574	SAMP	Fluorene	R2336713	J
	WG611574	SAMP	Naphthalene	R2336713	J
	WG611574	SAMP	Phenanthrene	R2336713	J
	WG611574	SAMP	1-Methylnaphthalene	R2336713	J
	WG611319	SAMP	Chromium, Trivalent	R2335133	O
	WG611319	SAMP	Arsenic	R2335133	O
	WG611319	SAMP	Selenium	R2335133	O
	WG611513	SAMP	Chromium, Hexavalent	R2341214	O
L593623-06	WG611369	SAMP	Mercury	R2334153	J
	WG611874	SAMP	pH	R2339753	T8
	WG611574	SAMP	Benzo(a)anthracene	R2336713	J
	WG611574	SAMP	Benzo(a)pyrene	R2336713	J
	WG611319	SAMP	Chromium, Trivalent	R2335133	O
	WG611319	SAMP	Arsenic	R2335133	O
	WG611319	SAMP	Selenium	R2335133	O
	WG611513	SAMP	Chromium, Hexavalent	R2341214	O

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG611574	SAMP	Fluorene	R2336713	J
	WG611574	SAMP	Phenanthrene	R2336713	J
	WG611574	SAMP	1-Methylnaphthalene	R2336713	J
	WG611574	SAMP	2-Methylnaphthalene	R2336713	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
09/14/12 at 09:40:12

TSR Signing Reports: 134
R5 - Desired TAT

Log BTEX by 8260 unless otherwise noted

Sample: L593623-01 Account: OXYGJCO Received: 09/06/12 09:00 Due Date: 09/13/12 00:00 RPT Date: 09/14/12 09:39

Sample: L593623-02 Account: OXYGJCO Received: 09/06/12 09:00 Due Date: 09/13/12 00:00 RPT Date: 09/14/12 09:39

Sample: L593623-03 Account: OXYGJCO Received: 09/06/12 09:00 Due Date: 09/13/12 00:00 RPT Date: 09/14/12 09:39

Sample: L593623-04 Account: OXYGJCO Received: 09/06/12 09:00 Due Date: 09/13/12 00:00 RPT Date: 09/14/12 09:39

Sample: L593623-05 Account: OXYGJCO Received: 09/06/12 09:00 Due Date: 09/13/12 00:00 RPT Date: 09/14/12 09:39

Sample: L593623-06 Account: OXYGJCO Received: 09/06/12 09:00 Due Date: 09/13/12 00:00 RPT Date: 09/14/12 09:39