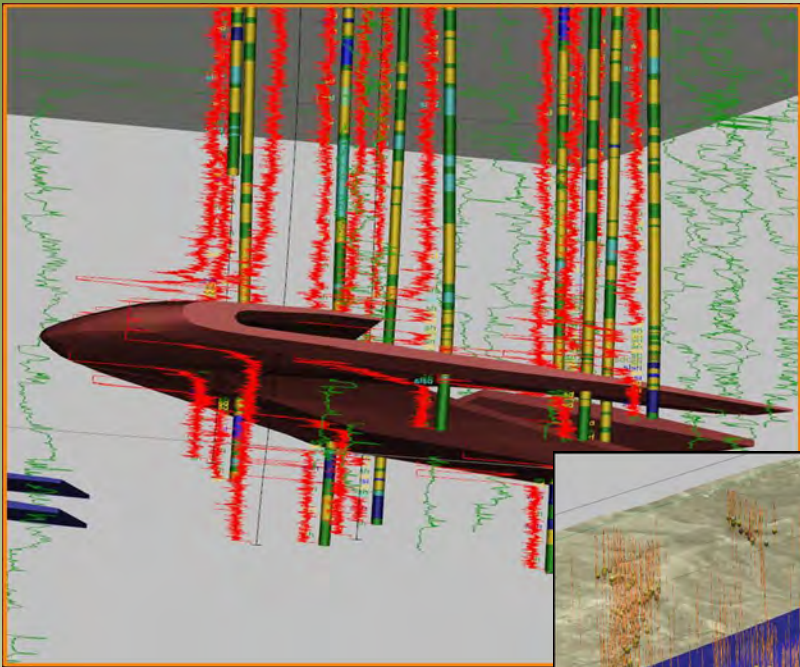
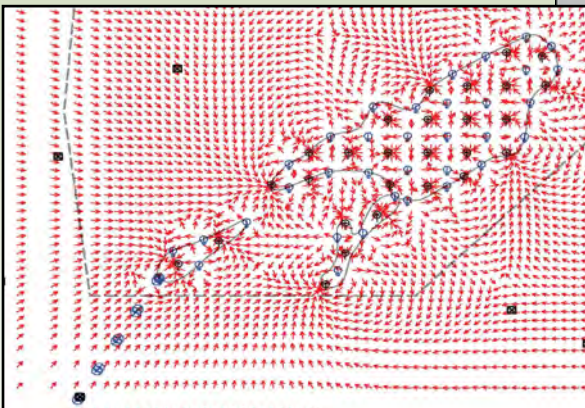
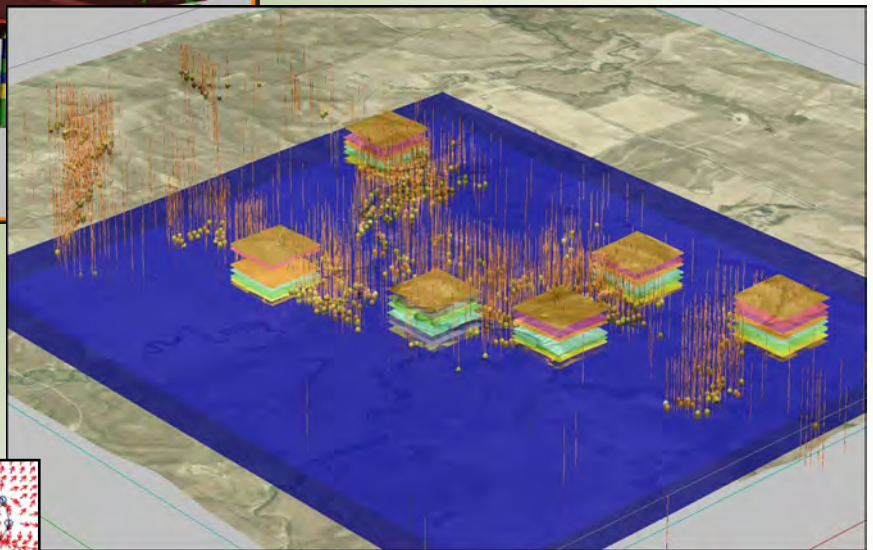


***Ross ISR Project USNRC License Application
Crook County, Wyoming***



December 2010



**Technical Report
Volume 5 of 6
Addenda 2.7-I through 2.9-B**



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ADDENDUM 2.7-I
GROUNDWATER QUALITY
DATA SUMMARY

Ross ISR Project Baseline Water Quality
Industrial Wells

Parameter	Units	19XX18						22X-19			
		3Q09	4Q09	1Q10	2Q10	3Q10	4Q10	1Q10	2Q10	3Q10	4Q10
Field											
Field Conductivity	umhos/cm	2790	3008	3120	3040	3080	3050	2720	2670	1987	2660
Field pH	s.u.	8.49	8.69	8.74	8.71	8.69	8.75	8.89	8.95	8.91	8.98
Field turbidity	NTUs		0.27	2.1	0.97	0.43	1.16	2.9	0.22	0.7	0.27
Depth to Water	ft										
Temperature	Deg C	14.2	8.71	8.9	11.2	13.6	13.2	10.4	11.5	13.1	12.3
Dissolved oxygen	mg/l				7.54	3.99	4.97		1.27	1.56	1.21
Dissolved oxygen, pct	%				69.4	38.3	47.6		11.8	14.5	11.4
General											
Alkalinity (as CaCO3)	mg/l	656	659	555	521	531	534	467	462	471	472
Ammonia	mg/l	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.3	0.3	0.4	0.5
Fluoride	mg/l	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.7	0.7	0.6
Laboratory conductivity	umhos/cm	2410	2360	2320	2390	2370	2390	2030	1840	2070	2080
Laboratory pH	s.u.	8.5	8.6	8.6	8.5	8.6	8.6	8.6	8.6	8.6	8.7
Nitrate/Nitrite	mg/l	0.5	0.5	0.1	0.5	0.5	0.5	<0.1	<0.1	<0.1	<0.1
Total Dissolved Solids	mg/l	1730	1660	1690	1690	1790	1660	1460	1440	1520	1420
Oil and Grease	mg/l										
Total Petroleum Hydrocarbons	mg/l										
Major Ions											
Calcium	mg/l	7	7	8	8	7	7	6	6	6	5
Magnesium	mg/l	2	2	3	3	3	3	2	2	2	2
Potassium	mg/l	5	5	4	4	4	5	4	4	4	5
Sodium	mg/l	655	629	580	499	543	542	444	465	507	474
Bicarbonate	mg/l	746	770	639	605	610	609	528	520	547	523
Carbonate	mg/l	27	17	19	15	19	21	21	21	13	26
Chloride	mg/l	6	7	6	8	7	6	10	13	10	10
Sulfate	mg/l	646	685	616	663	664	639	520	535	538	511
Metals											
Aluminum, dissolved	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic, dissolved	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium, dissolved	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, dissolved	mg/l	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4
Cadmium, dissolved	mg/l	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron, dissolved	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05
Iron, total	mg/l	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	0.07	0.05	0.06	<0.05
Lead, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Manganese, total	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mercury	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium, dissolved	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver, dissolved	mg/l					<0.003	<0.003			<0.003	<0.003
Uranium, dissolved	mg/l	0.086	0.085	0.074	0.089	0.087	0.078	0.02	0.022	0.021	0.02
Uranium, suspended	mg/l				<0.001	<0.001			<0.001	<0.001	
Vanadium, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Radiological											
Lead 210, dissolved	pCi/l		2.41		3.04	6.13			<1	<1	
Lead 210, suspended	pCi/l				1.43	2.8			1.21	1.46	
Polonium 210, dissolved	pCi/l		<1		4.04	6.4			<1	<1	
Polonium 210, suspended	pCi/l				3.91	5.9			<1	1.12	
Ra-226, dissolved	pCi/l	39.5	47.23	37.3	43.7	39.4	42	3.38	3.05	3.08	3.2
Ra-226, suspended	pCi/l				0.31	0.28			<0.2	<0.2	
Ra-228, Dissolved	pCi/l	<1	1.65	1.35	<1	<1	<1	<1	<1	<1	1.4
Radon-222	pCi/l			18000				9100			
Th-230, dissolved	pCi/l		<0.2		<0.2	<0.2			<0.2	<0.2	
Th-230, suspended	pCi/l				<0.2	<0.2			<0.2	<0.2	
Gross Alpha	pCi/l	227	185.2	252	267	167.7	324	46.3	45.3	38.5	47.9
Gross Beta	pCi/l	52.3	39.7	75	65.7	54	81.4	7.3	9.3	12.3	12.2
QA/QC											
Anion Sum	meq/L	26.82	27.69	24.14	24.45	24.66	24.18	20.48	20.76	20.94	20.39
Cation Sum	meq/L	29.15	28.06	25.93	22.39	24.28	24.27	19.86	20.78	22.6	21.13
Total Anion/Cation Balance	%	4.16	0.66	3.57	4.39	0.78	0.19	1.54	0.04	3.81	1.78
Total Dissolved Solids (calc)	mg/l	1720	1730	1550	1500	1550	1520	1270	1300	1350	1290

Ross ISR Project Baseline Water Quality
Stock Wells

Ross ISR Project

2

TR Addendum 2.7-1

Parameter	Units	CSWELL03				HBWELL01	HBWELL03					HBWELL04				P17177W				P21128P			
		4Q09	2Q10	3Q10	4Q10	3Q09	3Q09	1Q10	2Q10	3Q10	4Q10	3Q09	1Q10	2Q10	3Q10	3Q09	4Q09	3Q10	4Q10	2Q10	3Q10	4Q10	
Field																							
Field Conductivity	umhos/cm	682	641	599	653	706	1542	1611	1862	1620	1776	1477	1761	1671	1509	794	998	997	860	964	1051	991	
Field pH	s.u.	8.09	8.18	7.89	8.28	7.52	7.62	7.45	7.65	7.52	7.87	7.44	7.29	7.45	7.2	7.4	7.48	7.34	7.66	8.6	8.47	8.49	
Field turbidity	NTUs	84.5	4.61	7.55	54.4			21.1	10.34	14.43	7.83	2.18	6.23	2.15	4.07	0.37	0.82	1.34	1.27	116	130	3.52	
Depth to Water	ft					41.3																	
Temperature	Deg C	10.4	11.3	11.6	10.5	11	10.1	8.3	9.6	11	10.2	10.2	6.6	8	10.1	10.1	8.3	9.5	9.3	12.1	11.5	11.2	
Dissolved oxygen	mg/l		1.64	2.89	1.88				2.3	1.05	1.03			1.38	0.92			4	2.75	2.66	2.89	3.34	
Dissolved oxygen, pct	%		15	26.4	16.9				20.4	9.4	9.4			11.3	8.2			35.2	24.1	24.4	26.6	30.4	
General																							
Alkalinity (as CaCO3)	mg/l	327	318	324	336	343	485	460	494	524	531	351	444	354	364	339	415	331	320	414	438	425	
Ammonia	mg/l	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	0.3	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	0.1	
Fluoride	mg/l	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	<0.1	0.1	0.2	0.1	0.2	
Laboratory conductivity	umhos/cm	651	543	617	654	732	1720	1520	1790	1800	1760	1740	1620	1640	1700	923	904	889	822	962	956	973	
Laboratory pH	s.u.	8.2	8.4	8.1	8.2	8	8.2	8	8	8.1	8.1	8	7.9	7.8	7.9	7.8	7.9	8	8	8.4	8.4	8.5	
Nitrate/Nitrite	mg/l	<0.1	<0.1	<0.1	<0.1	1.6	<0.1	<0.1	<0.1	<0.1	<0.1	1.1	1.2	0.9	0.9	21.9		22.4	20	1.3	1.1	1.6	
Total Dissolved Solids	mg/l	430	390	380	370	440	1230	1140	1370	1310	1210	1420	1380	1380	1370	610	580	590	530	640	620	620	
Major Ions																							
Calcium	mg/l	28	35	37	38	63	83	95	106	91	79	202	203	195	199	115	117	108	100	19	13	20	
Magnesium	mg/l	15	18	19	20	47	52	55	56	52	44	60	62	58	64	30	31	30	27	9	7	11	
Potassium	mg/l	9	9	9	9	14	16	14	17	17	20	7	7	7	7	5	5	5	5	18	15	20	
Sodium	mg/l	97	76	74	82	26	248	178	238	267	275	133	141	117	123	39	38	38	39	185	207	205	
Bicarbonate	mg/l	399	379	395	410	419	591	561	603	640	648	429	542	432	444	414	507	404	391	491	514	492	
Carbonate	mg/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	10	13	
Chloride	mg/l	4	3	3	3	6	15	9	13	11	8	17	12	14	12	21	20	19	17	3	2	3	
Sulfate	mg/l	32	28	28	32	53	411	402	540	437	408	597	654	591	583	46	41	40	45	96	91	96	
Metals																							
Aluminum, dissolved	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	0.1	<0.1	<0.1	
Arsenic, dissolved	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	
Barium, dissolved	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
Boron, dissolved	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.1	0.1	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	
Cadmium, dissolved	mg/l	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	
Chromium, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	
Copper, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	
Iron, dissolved	mg/l	0.16	0.55	0.83	0.5	0.21	0.55	2.25	2.78	3.94	4.14	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	0.1	<0.05	<0.05	
Iron, total	mg/l	3.62	1.3	1.51	3.94	0.8	2.33	4.76	3.86	7.22	6.42	0.95	0.92	0.46	0.07	0.11		<0.05	<0.05	5.81	16.5	0.13	
Lead, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	
Manganese, total	mg/l	0.08	0.34	0.32	0.32	<0.02	0.15	0.25	0.25	0.9	0.21	0.08	0.08	0.07	0.07	<0.02		<0.02	<0.02	0.17	0.51	<0.02	
Mercury	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	
Molybdenum, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	
Nickel, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	
Selenium, dissolved	mg/l	<0.005	0.006	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	0.127	0.103	0.165	
Silver, dissolved	mg/l			<0.003	<0.003					<0.003	<0.003				<0.003			<0.003	<0.003		<0.003	<0.003	
Uranium, dissolved	mg/l	0.001	0.001	0.001	<0.001	0.01	0.006	0.005	0.006	0.004	0.002	0.034	0.033	0.034	0.033	0.024	0.024	0.022	0.022	0.388	0.271	0.375	
Uranium, suspended	mg/l		<0.001	<0.001					<0.001	<0.001				<0.001	<0.001			<0.001		0.004	0.002		
Vanadium, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	
Zinc, dissolved	mg/l	<0.01	<0.01	0.01	<0.01	0.18	0.25	<0.01	<0.01	<0.01	<0.01	0.03	0.05	0.04	0.03	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	
Radiological																							
Lead 210, dissolved	pCi/l		<1	<1					<1	<1				<1	<1			<1		1.76	17.4		
Lead 210, suspended	pCi/l		<1	<1					1.21	<1				1.8	<1			<1		1.26	1.8		
Polonium 210, dissolved	pCi/l		<1	<1					<1	<1				<1	<1			<1		<1	<1		
Polonium 210, suspended	pCi/l		<1	<1					<1	<1				<1	<1			<1		<1	<1		
Ra-226, dissolved	pCi/l	0.4	0.3	0.34	0.4	0.27	0.87	0.85	1.03	0.77	0.8	0.28	0.31	0.31	0.52	<0.2		<0.2	0.3	0.21	0.3	0.3	
Ra-226, suspended	pCi/l		<0.2	<0.2																			

Ross ISR Project Baseline Water Quality
Stock Wells

Ross ISR Project

3

TR Addendum 2.7-1

Parameter	Units	P22582P		P50113W				P50883W		P61007W	P71108W				P84665W			SBWELL01				
		4Q09	4Q10	3Q09	4Q09	3Q10	4Q10	3Q10	4Q10	3Q09	3Q09	4Q09	2Q10	3Q10	3Q09	3Q10	4Q10	3Q09	4Q09	2Q10	3Q10	4Q10
Field																						
Field Conductivity	umhos/cm	1026	1141	1440	1757	1613	1636	658	699	1065	1731	1940	1652	1697	804	983	960	1088	1201	1150	1263	1176
Field pH	s.u.	8.9	9.11	7.45	7.64	7.43	7.85	7.78	8.02	8.63	7.53	7.62	7.54	7.47	7.53	7.42	7.84	8.73	9.09	9.01	8.96	9.08
Field turbidity	NTUs	1.99	1.05	0.98	0.18	0.34	0.98	19.48	1.35	1.43	1.86	0.25	0.7	0.29	25	0.88	0.97	3.08	0.37	1.01	0.86	1.08
Depth to Water	ft																					
Temperature	Deg C	8.7	10.5	9.5	8	8.3	9.1	10.5	11	12.5	13	10.6	10.5	11.5	10.4	11	9.2	14.4	9.9	11.3	11.2	10.8
Dissolved oxygen	mg/l		1.68			1.86	2.79	4.37	5.58				0.94	1.94		3.14	3.5			1.1	1.71	0.92
Dissolved oxygen, pct	%		15			15.4	24.1	39.3	51.5				8	18		28.3	30.7			10.1	15.7	8.3
General																						
Alkalinity (as CaCO3)	mg/l	440	491	511	553	536	534	296	340	537	580	572	541	549	406	412	412	531	533	531	532	535
Ammonia	mg/l	<0.1	0.6	<0.1		0.5	<0.1	<0.1	0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	0.2	<0.1
Fluoride	mg/l	0.6	0.9	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	<0.1	0.1	<0.1	0.1
Laboratory conductivity	umhos/cm	972	1120	1840	1710	1500	1640	588	686	1170	2190	1930	1670	1660	922	936	952	1170	1130	1140	1140	1140
Laboratory pH	s.u.	8.6	8.7	8	8	8.1	8	8.1	8.2	8.8	8	7.9	8	8.1	8	8.1	8	8.7	8.6	8.7	8.7	8.7
Nitrate/Nitrite	mg/l	<0.1	<0.1	44.9		23.9	29	0.1	0.2	<0.1	0.6		0.2	0.2	0.9	2	2.4	<0.1		<0.1	<0.1	<0.1
Total Dissolved Solids	mg/l	610	730	1320	1150	1060	1130	370	430	720	1610	1460	1200	1160	590	650	620	740	740	750	770	750
Major Ions																						
Calcium	mg/l	12	6	120	111	97	94	33	44	3	76	75	70	65	74	81	79	1	2	2	2	2
Magnesium	mg/l	6	3	67	60	52	54	16	20	1	98	79	71	66	36	36	37	<1	<1	<1	<1	<1
Potassium	mg/l	5	4	7	7	6	7	7	6	3	9	9	9	9	5	5	6	2	3	3	3	3
Sodium	mg/l	234	277	208	190	162	202	81	81	293	381	328	230	242	76	83	75	313	268	272	274	288
Bicarbonate	mg/l	500	536	624	675	654	652	361	414	591	707	698	660	670	495	503	502	609	600	596	602	592
Carbonate	mg/l	18	31	<5	<5	<5	<5	<5	<5	32	<5	<5	<5	<5	<5	<5	<5	20	24	26	23	30
Chloride	mg/l	4	2	63	48	36	41	3	3	<1	7	7	5	4	6	8	8	1	1	1	1	<1
Sulfate	mg/l	85	112	249	259	172	231	39	44	83	679	601	387	377	98	107	107	96	102	95	96	94
Metals																						
Aluminum, dissolved	mg/l	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1
Arsenic, dissolved	mg/l	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	0.007	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.007		0.007	0.006	0.007
Barium, dissolved	mg/l	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Boron, dissolved	mg/l	0.2	0.3	<0.1		<0.1	<0.1	<0.1	<0.1	0.2	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	0.1		0.1	0.1	<0.1
Cadmium, dissolved	mg/l	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002
Chromium, dissolved	mg/l	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Copper, dissolved	mg/l	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Iron, dissolved	mg/l	<0.05	0.07	<0.05		<0.05	<0.05	0.07	0.09	<0.05	<0.05		<0.05	<0.05	0.07	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05
Iron, total	mg/l	0.22	0.11	<0.05		<0.05	<0.05	1.6	0.23	0.17	0.07		<0.05	<0.05	3.75	0.07	0.09	<0.05		<0.05	<0.05	<0.05
Lead, dissolved	mg/l	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02
Manganese, total	mg/l	<0.02	<0.02	0.07		0.44	0.42	0.05	0.02	<0.02	0.25		0.18	0.21	0.05	0.02	<0.02	<0.02		<0.02	<0.02	<0.02
Mercury	mg/l	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
Molybdenum, dissolved	mg/l	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02
Nickel, dissolved	mg/l	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Selenium, dissolved	mg/l	<0.005	<0.005	0.042	0.026	0.05	0.03	<0.005	<0.005	<0.005	0.026	0.015	0.007	0.008	0.009	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver, dissolved	mg/l		<0.003			<0.003	<0.003	<0.003	<0.003					<0.003		<0.003	<0.003				<0.003	<0.003
Uranium, dissolved	mg/l	0.003	<0.001		0.21	0.173	0.189	0.025	0.028	0.001	0.113	0.094	0.064	0.065	0.056	0.056	0.056	0.001	0.001	0.002	<0.001	0.002
Uranium, suspended	mg/l					<0.001		<0.001					<0.001	<0.001		<0.001				<0.001	<0.001	
Vanadium, dissolved	mg/l	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02
Zinc, dissolved	mg/l	<0.01	<0.01	<0.01		<0.01	<0.01	0.04	0.07	<0.01	0.03		0.03	0.02	0.08	0.08	0.08	<0.01		<0.01	<0.01	<0.01
Radiological																						
Lead 210, dissolved	pCi/l					2.1		<1					<1	<1		<1				1.04	<1	
Lead 210, suspended	pCi/l					<1		<1					<1	<1		<1				<1	1.5	
Polonium 210, dissolved	pCi/l					<1		<1					<1	<1		<1				<1	<1	
Polonium 210, suspended	pCi/l					<1		<1					<1	<1		<1				<1	<1	
Ra-226, dissolved	pCi/l	<0.2	<0.2	0.6		0.5	0.2	7.7	<0.2	<0.2	<0.2		0.22	0.9	0.33	0.3	0.4	<0.2		<0.2	<0.2	<0.2
Ra-226, suspended	pCi/l					<0.2		<0.2					<0.2	<0.2		<0.2				<0.2	0.7	
Ra-228, Dissolved	pCi/l	2.59	<1	<1		<1	<1	<1	1.27	<1	<1		1.07	1.6	<1	<1	<1	<				

Parameter	Units	SBWELL02			TWWELL03	
		2Q10	3Q10	4Q10	3Q10	4Q10
Field						
Field Conductivity	umhos/cm	789	843	1043	1381	1437
Field pH	s.u.	7.78	7.7	8.15	8.91	9.07
Field turbidity	NTUs	1.75	1.23	0.94	0.51	0.9
Depth to Water	ft					
Temperature	Deg C	10.8	10.8	10.4	11.5	10.9
Dissolved oxygen	mg/l	0.82	1.3	2.36	1.81	7.5
Dissolved oxygen, pct	%	7.7	12	21.1	16.7	67.6
General						
Alkalinity (as CaCO3)	mg/l	390	387	488	603	596
Ammonia	mg/l	<0.1	0.1	0.2	<0.1	0.2
Fluoride	mg/l	<0.1	<0.1	0.2	1.3	1.5
Laboratory conductivity	umhos/cm	758	735	1010	1440	1490
Laboratory pH	s.u.	8.1	8.2	8.3	8.8	8.7
Nitrate/Nitrite	mg/l	0.3	0.4	<0.1	<0.1	<0.1
Total Dissolved Solids	mg/l	480	480	650	1000	970
Major Ions						
Calcium	mg/l	35	39	19	2	3
Magnesium	mg/l	23	26	11	1	2
Potassium	mg/l	15	16	12	7	4
Sodium	mg/l	106	98	205	374	360
Bicarbonate	mg/l	476	472	595	664	657
Carbonate	mg/l	<5	<5	<5	35	35
Chloride	mg/l	<1	1	1	2	2
Sulfate	mg/l	40	37	78	201	195
Metals						
Aluminum, dissolved	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic, dissolved	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005
Barium, dissolved	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, dissolved	mg/l	0.1	0.1	0.2	0.6	0.5
Cadmium, dissolved	mg/l	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Copper, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Iron, dissolved	mg/l	0.14	0.2	0.06	<0.05	<0.05
Iron, total	mg/l	0.46	0.61	0.12	<0.05	<0.05
Lead, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
Manganese, total	mg/l	0.05	0.05	0.04	<0.02	<0.02
Mercury	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium, dissolved	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005
Silver, dissolved	mg/l		<0.003	<0.003	<0.003	<0.003
Uranium, dissolved	mg/l	0.005	0.005	<0.001	<0.001	<0.001
Uranium, suspended	mg/l	<0.001	<0.001		<0.001	
Vanadium, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Radiological						
Lead 210, dissolved	pCi/l	<1	<1		<1	
Lead 210, suspended	pCi/l	1.11	<1		<1	
Polonium 210, dissolved	pCi/l	<1	<1		<1	
Polonium 210, suspended	pCi/l	<1	<1		<1	
Ra-226, dissolved	pCi/l	0.21	0.2	<0.2	<0.2	<0.2
Ra-226, suspended	pCi/l	<0.2	7		<0.2	
Ra-228, Dissolved	pCi/l	<1	1.22	<1	<1	<1
Radon-222	pCi/l					
Th-230, dissolved	pCi/l	<0.2	<0.2		<0.2	
Th-230, suspended	pCi/l	<0.2	<0.2		<0.2	
Gross Alpha	pCi/l	4.1	3.89	2.7	<3.1	6.7
Gross Beta	pCi/l	12.3	9.53	7.6	<6.7	6.9
QA/QC						
Anion Sum	meq/L	8.64	8.56	11.41	16.39	16.12
Cation Sum	meq/L	8.62	8.69	11.07	16.65	16.01
Total Anion/Cation Balance	%	0.13	0.76	1.5	0.79	0.34
Total Dissolved Solids (calc)	mg/l	450	450	620	950	570

Ross ISR Project Baseline Water Quality
Domestic Wells

Parameter	Units	CSWELL01						DWWELL01						HBWELL05						HBWELL06	JJWELL01	P144030W
		3Q09	4Q09	1Q10	2Q10	3Q10	4Q10	3Q09	4Q09	1Q10	2Q10	3Q10	4Q10	3Q09	1Q10	2Q10	3Q10	4Q10	1Q10	2Q10	3Q10	
Field																						
Field Conductivity	umhos/cm	2770	1874	1635	3080	3310	1989	2980	3250	3430	3310	3160	3260	1343	1539	1542	1420	1575	1450	1322	913	
Field pH	s.u.	7.94	8.38	8.44	8.26	7.99	8.42	8.21	8.29	8.45	8.5	8.3	8.69	7.64	7.57	7.78	7.51	7.84	8.8	9.04	7.44	
Field turbidity	NTUs		0.06	0.27	0.2	0.27	0	27.5	37.7	7.04	6.22	5.13	4.86		141	82	70.7	14.46	1.2	0.74	1.51	
Depth to Water	ft	148.8																				
Temperature	Deg C	17.3	11.3	7.8	9	12	15.3	14.8	10.22	8.4	9.5	12.2	11.2	12.6	8.5	9.8	11.1	11.1	8.9	9.4	14.8	
Dissolved oxygen	mg/l				1.53	2.08	0.83	2.7			2.21	1.34	1.19			3.03	4.72	2.72		1.15	1.21	
Dissolved oxygen, pct	%				13.4	19	7.3				19.6	12.7	10.5			27	43.5	24.8		10.3	12	
General																						
Alkalinity (as CaCO3)	mg/l	792	633	633	637	642	646	647	589	597	586	593	588	499	519	527	521	543	768	276	443	
Ammonia	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	1.2	0.6	0.4	0.4	0.4	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.1	<0.1	
Fluoride	mg/l	0.4	0.3	0.3	0.4	0.3	0.3	0.7	0.7	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.2	0.2	2.5	0.3	0.1	
Laboratory conductivity	umhos/cm	2560	1880	1550	1930	2600	2100	2690	2560	2500	2210	2540	2540	1570	1520	1370	1610	1660	1410	1300	846	
Laboratory pH	s.u.	8.3	8.4	8.4	8.4	8.3	8.4	8.4	8.5	8.4	8.4	8.5	8.5	8.1	8	8	8.2	8.1	8.5	8.7	8	
Nitrate/Nitrite	mg/l	0.4	0.1	<0.1	0.6	0.9	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
Total Dissolved Solids	mg/l	1920	1340	1030	1610	1920	1430	1880	1780	1820	1820	1820	1760	1100	1090	1160	1160	1100	960	900	520	
Oil and Grease	mg/l																		<5			
Total Petroleum Hydrocarbons	mg/l																		<5			
Major Ions																						
Calcium	mg/l	39	16	9	29	43	22	16	16	16	17	17	15	87	87	79	90	79	3	9	49	
Magnesium	mg/l	30	12	6	19	33	18	6	6	6	6	6	6	36	34	33	38	36	2	3	25	
Potassium	mg/l	14	9	8	11	12	12	11	12	12	12	11	13	8	8	7	8	8	3	8	16	
Sodium	mg/l	574	444	393	527	570	459	629	665	610	624	582	558	258	232	251	246	229	397	263	113	
Bicarbonate	mg/l	931	758	748	760	772	763	774	682	710	689	697	690	609	633	642	635	662	886	314	541	
Carbonate	mg/l	18	7	12	9	5	12	8	18	9	13	13	14	<5	<5	<5	<5	<5	25	11	<5	
Chloride	mg/l	6	3	2	6	7	4	16	8	7	11	7	7	6	4	5	4	4	46	6	1	
Sulfate	mg/l	688	368	224	558	723	460	690	794	689	727	691	663	327	355	381	378	367	25	350	56	
Metals																						
Aluminum, dissolved	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Arsenic, dissolved	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Barium, dissolved	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Boron, dissolved	mg/l	0.4	0.4	0.3	0.4	0.4	0.4	0.6	0.6	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.5	0.2	<0.1	
Cadmium, dissolved	mg/l	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Chromium, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Copper, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Iron, dissolved	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.96	0.21	0.58	0.66	0.88	0.9	0.49	1.55	1.17	0.82	0.17	<0.05	0.05	0.08	
Iron, total	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	5.02	2.73	1.84	1.73	1.73	1.71	32.8	17	7.38	8.39	2.4	0.1	0.14	0.13	
Lead, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
Manganese, total	mg/l	0.02	<0.02	<0.02	0.02	<0.02	<0.02	0.07	0.05	0.04	0.03	0.04	0.03	0.08	0.12	0.11	0.17	0.15	0.08	<0.02	0.08	
Mercury	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Molybdenum, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
Nickel, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Selenium, dissolved	mg/l	0.006	<0.005	<0.005	<0.005	0.009	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	
Silver, dissolved	mg/l					<0.003	<0.003						<0.003	<0.003			<0.003	<0.003			<0.003	
Uranium, dissolved	mg/l	0.014	0.008	0.004	0.015	0.02	0.011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.015	0.011	0.01	0.013	0.013	<0.001	<0.001	0.024	
Uranium, suspended	mg/l				<0.001	<0.001								<0.001	<0.001		<0.001	<0.001			<0.001	
Vanadium, dissolved	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
Zinc, dissolved	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Radiological																						
Lead 210, dissolved	pCi/l		<1		<1	<1					<1	<1				<1	<1				<1	
Lead 210, suspended	pCi/l				<1	<1					1.78	1.21				1.56	<1				<1	
Polonium 210, dissolved	pCi/l		<1		<1	<1					<1	<1				<1	<1				<1	
Polonium 210, suspended	pCi/l				<1	<1					9.2	8.91				<1	<1				<1	
Ra-226, dissolved	pCi/l	0.86	<0.2	0.38	0.5	0.49	0.4	0.35	<0.2	0.3	0.37	0.21	0.4	0.2	<0.2	<0.2	<0.2	0.2	0.27	0.38	0.8	
Ra-226, suspended	pCi/l				<0.2	<0.2					<0.2	<0.2				<0.2	<0.2				<0.2	
Ra-228, Dissolved	pCi/l	1.66	1.44	<1	<1	<1	1.5	<1	2.84	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Radon-222	pCi/l			1600																		
Th-230, dissolved	pCi/l		<0.2		<0.2	<0.2					<0.2	<0.2				<0.2	<0.2				<0.2	
Th-230, suspended	pCi/l				<0.2	<0.2					<0.2	<0.2				<0.2	<0.2				<0.2	
Gross Alpha	pCi/l	18.3	16.3	7.2	9.5	14.6	12.2	10.7	17.3	14.9	12	12.6	11.7	7.1	11.8	7.5	11.3	12.7	<2	5.2	23.9	
Gross Beta	pCi/l	11.3	12.4	<3.96	6.6	13.2	4.3	6.7	11.8	<10.2	10.5	7.71	7.2	7.2	10	6.4	8.77	7.2	3.6	6.9	23.8	
QA/QC																						
Anion Sum	meq/L	30.39	20.45	17.4	24.55	28.09	22.64	27.79	28.57	26.51	27.2	26.47	25.79	17	17.89	18.61	18.39	18.6	17.32	13	10.07	
Cation Sum	meq/L	29.66	21.3	18.28	26.18	29.96	22.79	28.89	30.51	28.15	28.78	26.91	25.79	18.73	17.4	17.74	18.51	17.03	17.63	12.33	9.84	
Total Anion/Cation Balance	%	1.21	2.03	2.47	3.22	3.22	0.31	1.93	3.27	3.01	2.81	0.82	0.01	4.86	1.38	2.38	0.33	4.4	0.88	2.67	1.13	
Total Dissolved Solids (calc)	mg/l	1830	1230	1020	1530	1770	1360	1760	1850	1700	1750	1670	1610	1020	1030	1070	1080	1050				

Ross ISR Project Baseline Water Quality
Domestic Wells

Parameter	Units	P31770W			P42868W	P61006W	P78287W	TSWELL01	TW01					TW02					
		3Q09	4Q09	1Q10	3Q09	3Q09	3Q09	4Q09	3Q09	1Q10	2Q10	3Q10	4Q10	3Q09	4Q09	1Q10	2Q10	3Q10	4Q10
Field																			
Field Conductivity	umhos/cm	1910	3320	3620	1167	918	737	1303	1616	2680	1989	1810	1916	1922	2780	2890	2880	1889	2760
Field pH	s.u.	7.85	7.96	7.8	8.71	7.83	7.72	8.81	8.25	8.19	8.33	8.05	8.42	8.15	8.29	8.1	8.18	7.81	8.25
Field turbidity	NTUs	0.02	0.69	0.56	1.71	1.2	0.74	2540		0.19	1.33	0.88	1.35		0.57	0.56	0.89	1.42	2.05
Depth to Water	ft								27.7					20.4					
Temperature	Deg C	12	8.7	8.2	10.8	12.9	16.1	10.4	11.6	7.5	8.7	12.8	13.2	10.9	9	5.5	8.8	13.6	11.1
Dissolved oxygen	mg/l										1.29	1.19	1.03				2.29	0.78	1.02
Dissolved oxygen, pct	%										10.9	11.2	10.1				19	7.5	9.3
General																			
Alkalinity (as CaCO3)	mg/l	501	504	499	547	490	116	587	836	684	668	685	689	646	654	621	613	630	632
Ammonia	mg/l	<0.1		<0.1	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3
Fluoride	mg/l	0.3	0.3	0.3	0.3	0.1	1.1	0.4	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.5	0.5	0.5	0.5
Laboratory conductivity	umhos/cm	2510	2550	2550	1250	1030	841	1300	2000	2000	2150	2050	2020	2190	2110	2110	1840	2170	2160
Laboratory pH	s.u.	8.2	8.2	8.2	8.7	8.3	8	8.7	8.4	8.4	8.4	8.4	8.5	8.3	8.5	8.3	8.3	8.3	8.4
Nitrate/Nitrite	mg/l	0.6		1.1	<0.1	<0.1	<0.1	0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1
Total Dissolved Solids	mg/l	1800	1920	1890	810	660	580	910	1350	1440	1380	1430	1360	1500	1450	1550	1500	1500	1490
Oil and Grease	mg/l																		
Total Petroleum Hydrocarbons	mg/l																		
Major Ions																			
Calcium	mg/l	57	56	74	2	18	22	4	9	8	9	9	8	19	19	24	26	26	24
Magnesium	mg/l	25	23	37	1	9	5	2	4	4	4	5	4	8	8	11	11	12	11
Potassium	mg/l	14	12	11	3	8	6	4	7	6	7	7	8	11	11	12	11	13	13
Sodium	mg/l	593	514	565	321	244	148	353	509	457	438	477	473	543	544	477	484	482	466
Bicarbonate	mg/l	612	615	609	616	578	142	666	935	815	798	810	793	780	762	757	742	754	755
Carbonate	mg/l	<5	<5	<5	25	9	<5	24	42	10	8	13	23	<5	18	<5	<5	8	8
Chloride	mg/l	21	21	23	1	<1	6	1	8	5	7	4	4	15	10	10	11	9	8
Sulfate	mg/l	842	853	865	117	74	260	122	331	393	379	392	375	576	481	513	502	498	467
Metals																			
Aluminum, dissolved	mg/l	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic, dissolved	mg/l	<0.005		<0.005	0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium, dissolved	mg/l	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, dissolved	mg/l	0.3		0.2	0.2	0.1	0.5	0.3	0.59	0.5	0.5	0.5	0.5	0.52	0.5	0.4	0.4	0.4	0.4
Cadmium, dissolved	mg/l	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.0001	<0.002	<0.002	<0.002	<0.002	<0.0001	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium, dissolved	mg/l	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper, dissolved	mg/l	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.001	<0.01	<0.01	<0.01	<0.01	0.002	<0.01	<0.01	<0.01	<0.01	<0.01
Iron, dissolved	mg/l	0.9		<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.05	<0.05	0.06	0.05	<0.05	<0.05	<0.05	<0.05
Iron, total	mg/l	0.91		0.05	<0.05	0.16	0.14	0.22	0.04	0.08	<0.05	0.09	0.12	0.11	0.22	0.13	<0.05	0.12	<0.05
Lead, dissolved	mg/l	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.002	<0.02	<0.02	<0.02	<0.02	<0.002	<0.02	<0.02	<0.02	<0.02	<0.02
Manganese, total	mg/l	0.15		0.04	<0.02	<0.02	0.12	<0.02	0.01	<0.02	<0.02	<0.02	<0.02	0.02	0.02	0.03	0.03	0.03	0.03
Mercury	mg/l	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum, dissolved	mg/l	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel, dissolved	mg/l	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium, dissolved	mg/l	0.006	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver, dissolved	mg/l											<0.003	<0.003					<0.003	<0.003
Uranium, dissolved	mg/l	0.017	0.015	0.071	<0.001	0.002	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium, suspended	mg/l											<0.001	<0.001				<0.001	<0.001	
Vanadium, dissolved	mg/l	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc, dissolved	mg/l	0.02		0.06	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	<0.01	<0.01	0.02	0.01	0.02	0.01	0.03	0.01
Radiological																			
Lead 210, dissolved	pCi/l										<1	<1					<1	<1	
Lead 210, suspended	pCi/l										<1	<1					<1	<1	
Polonium 210, dissolved	pCi/l										<1	<1					<1	<1	
Polonium 210, suspended	pCi/l										<1	<1					<1	<1	
Ra-226, dissolved	pCi/l	0.32		0.43	<0.2	1.13	<0.2	0.46	<0.2	0.2	0.32	<0.2	0.3	0.45	0.31	0.49	0.49	0.41	1.1
Ra-226, suspended	pCi/l										<0.2	<0.2					<0.2	<0.2	
Ra-228, Dissolved	pCi/l	<1		<1	<1	<1	<1	1.17	<1	<1	<1	<1	<1	<1	1.54	<1	<1	<1	<1
Radon-222	pCi/l			390															
Th-230, dissolved	pCi/l										<0.2	<0.2					<0.2	<0.2	
Th-230, suspended	pCi/l										<0.2	<0.2					<0.2	<0.2	
Gross Alpha	pCi/l	7.8	36.8	35.8	<2	4.8	<2	10.8	<2	<2	<3.7	4.2	2.4	4.4		3.1	<2	4.61	3.1
Gross Beta	pCi/l	12.9	17.1	14.4	<3	3.6	4.1	7.3	<3	<4.11	5.8	8.55	4.4	<3	11.7	8.6	6.6	10.4	9.2
QA/QC																			
Anion Sum	meq/L	28.2	28.45	28.71	13.43	11.34	7.97	14.32	23.9	22.05	21.5	22.05	21.75	25.36	23.4	23.39	23.04	23.26	22.59
Cation Sum	meq/L	30.99	27.32	31.63	14.24	12.44	8.11	15.75	23.14	20.75	20.03	21.76	21.56	25.51	25.55	23.09	23.51	23.53	22.76
Total Anion/Cation Balance	%	4.72	2.02	4.83	2.91	4.62	0.82	4.74	1.62	3.04	3.54	0.65	0.44	0.29	4.39	0.64	1	0.59	0.39
Total Dissolved Solids (calc)	mg/l	1850	1780	1880	770	650	520	840	1370	1280	1250	1310	870	1560	1470	1420	1410	1420	1370

ADDENDUM 2.7-J
GROUNDWATER QUALITY MONITORING
FIELDS SHEETS AND LABORATORY REPORTS

SAMPLING INFORMATION

Sampling Point 12-18 DM Project ROSS ISR
 Location SW NW section 18 T53N, R67W W.O.# 2009 142 35
 Sample ID# 12-18 DM Date Sampled 12/17/09 Time 21:00 am pm
 Describe Sampling Point Discharge pipe from air lift development

Well Depth 632 ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
 Date / / Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump Air-Lift by rig
 Tap Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

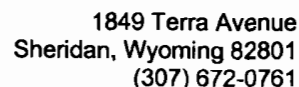
EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
20:20	9.20	965 µS	11.8				~2.5-3.0
20:35	10.51	953 µS	9.9	148			2.0
20:40	10.43	993	15.1	131			1.0
20:50	10.84	1345 µS	21.3	405			.15
21:00	11.15	1860 µS	23.0	415			.5

Pumping Start Time 19:30 WL _____ Pumping End Time 21:00 WL _____

Comments: Screen assembly is 3" PVC V-Wire from 612-632
7:30 - 9:30 unhooked well several times from deep depth
Temp. varies as rate changes off from warm rig air
Rate changed off to ~0.5 gpm / SWL = 176.55' BTOC 1-30-10

Form completed by: Mike Wolf Witnessed by: _____



Sampling Point 12-18 OZ Project ROSS ISR
Location _____ W.O.# 2009 142 35
Sample ID# 12-18 OZ Date Sampled 12 / 16 / 09 Time 18:00 am pm
Describe Sampling Point From Discharge Pipe from Air Lift Development

and all field measurements (yes or no). Tubing used only for

Time	PH (units)	Temperature Corrected Conductance (μ mhos/cm)	Temperature ($^{\circ}$ C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
17:00	9.33	2.66 mS	9.7	15.73			20-30 ?
17:10	9.18	2.50 mS	11.2	10.43			
17:30	9.05	2.49 mS	11.4	8.65			
17:40	9.11	2.51	11.6	9.70			
18:00	9.08	2.54	11.7	11.75			

* SWL = 171.07' BTOC 1-30-10

- 18 -

SAMPLING INFORMATION

Sampling Point 12-18 SA Project ROSS ISR
 Location SW NW Section 18 T53N R67W W.O.# 2009 142 35
 Sample ID# 12-18 SA Date Sampled 12 12 109 Time 12:00 (am)
 Describe Sampling Point Discharge pipe from rig Air-lift system
at end of initial well development
 Well Depth 104 ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
 Date ____/____/____ Time ____ am pm Casing Volume _____ gal
 At least _____ bore volumes have been evacuated before sampling
 Sampling method ☒ Submersible pump Grab from discharge
☐ Tap ☐ Bailer _____
 Pump intake or bailer set at 95 ft below MP.
 Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
11:00	9.57	906 µS	11.4	93.3			.5
11:15	9.55	908 µS	13.2	82.0			.5
11:20	9.51	914 µS	13.6	67.0			.25
11:30	9.52	907 µS	14.6	72.5			.25
11:45	9.48	909 µS	15.7	72.5			.20
12:00	9.52	911 µS	16.6	76.1			.15

Pumping Start Time 10:30 WL _____ Pumping End Time 12:00 WL _____
 Comments: Temp increase as flow rate decreases from rig
Compressor

* SWL = 51.59' BTCL # -30-10

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-18 SM Project ROSS ISR
 Location SWNW Section 18 T53N, R67W W.O.# 200.2 142 35
 Sample ID# 12-18 SM Date Sampled 12 / 18 / 09 Time 15:45 pm
 Describe Sampling Point Discharge Pipe from Air-lift development

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter _____ in
 Date ____ / ____ / ____ Time ____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at 327 ft below MP. "Stinger"

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
15:00	9.80	1542 µS	13.8	72.1			10+ gpm
15:15	9.66	1537 µS	14.1	48.5			"
15:30	9.67	1536 µS	14.2	60.2			"
15:45	9.63	1537 µS	15.1	55.1		850	"

Pumping Start Time 14:00 WL _____ Pumping End Time 15:45 WL _____

Comments: water reasonably clean, temp is affected by compressor

* SWL = 89.32' BTOL 1-30-10

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18 DM Project ROSS ISR
 Location SW 9W, 518, T43N, R67W W.O.# 09142.35
 Sample ID# 14-18 DM Date Sampled 1 / 21 / 10 Time 1645 am (pm)
 Describe Sampling Point 5" PVC WELL

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
 Date 1 / 21 / 10 Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1545	8.96	1073 µS	6.9°C	90.0			
1600	10.23	1494 µS	9.2°C	733.0			
1620	10.26	1768 µS	10.6	297			
1645	10.02	1872 µS	10.6 9.6°C	83.5			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: 578' @ 2-3 gal/min @ 1545 / 578' 16PM @ 1615 /

578' @ 1/2 GPM @ 1645 — using new rig ~~same~~ that
has better air compressor

Water Level 1-23-10 @ 1115 TOC = 188.70' / SWL = 163.59' BTOC
1-28-10

Form completed by: Rod Jullin Witnessed by: _____

SAMPLING INFORMATION

Sampling Point SW 14-180Z Project 2005 ISR
 Location SW SW, S18, T53N, R67W W.O.# 09142.35
 Sample ID# 14-180Z Date Sampled 1 115 10 Time 12:45 am pm
 Describe Sampling Point 5" PVC Well

Well Depth _____ ft below MP Depth to Water (below MP) - ft Casing Diameter 5" in
 Date 1 115 10 Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
12:15	10.00	2,570	10.1	761	-	-	-
12:30	9.60	2,780	10.9	444	-	-	-
12:45	9.92	2,500	12.1	662	-	-	-

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: MAINTENANCE 6-7 gpm @ 320'; MAINTENANCE 14 gpm @ 470'
- START AT 12:25 @ 48' @ 12:25 → 15' gpm + SURGE TANK
* SWL = 159.30' BTOC 1-28-10

Form completed by: Ben Schaffer

Witnessed by: Joe Symers

SAMPLING INFORMATION

Sampling Point 14-18SA Project Road ISR
 Location SWSW, S-18, T53N, R67W W.O.# 09142-35
 Sample ID# 14-18SA Date Sampled 1/13/10 Time 1050 (am) pm
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
 Date / / Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1020	10.02	1836µS	6.2	82.3			
1040	9.94	1812µS	6.8	47.3			
1050	9.90	2.41mS	6.1	44.6			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: 61' @ 26PM @ 1020 - Started blowing @ 0950 -

61' @ 26PM @ 1050

* SWL = 23.95' BTOC 1-28-10

Form completed by: Rob Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-185M Project Doas ISR
 Location SWSW, S-18, T53N, R67W W.O.# 0942-35
 Sample ID# 14-185M Date Sampled 1 / 22 / 10 Time 1445 am (pm)
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter _____ in
 Date 1 / 22 / 10 Time 1445 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____	gpm
x	0.00223
_____	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1420	10.08	1732	8.1°C	57.5			
1445	9.92	1673µS	7.3°C	67.4			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: 240' @ 10-12 GPM, Starting blowing water @ 1340

Water level 1-23-10 @ 1120 TOC = 67.94'

* SWL = 67.11' BTOC 1-28-10

Form completed by: Rod Fuller Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point 21-19 DM Project ROSS ISR
 Location N.E.N.W. SEC 19, T53N, R67W W.O.# 2009142-35
 Sample ID# 21-19DM Date Sampled 1 127 10 Time 1500 am (pm)
 Describe Sampling Point 5" PVC WELL

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter _____ in
 Date 1 / 1 Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1400	8.94	1085	5.2	158			
1430	10.40	1489	9.0	242			
1445	10.30	1906	9.3	158			
1500	10.21	2.71 MS	10.4	91.1			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Started blowing @ 1350 @ 552' @ 16PM
@ 1420 1/2 GPM

* Used 16 bags of sand for packer

* Water level 1-29-10 @ 1120 = 212.91' / SWL = 206.05' BTOC 1-30-10

Form completed by: Rod Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19 02 Project ROSS ISR
 Location NENW, SEC. 19, T53N, R 67W W.O.# 2009142-35
 Sample ID# _____ Date Sampled 1 / 26 / 10 Time 1400 am ☒ pm
 Describe Sampling Point 5" PVC WELL

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter _____ in
 Date ____ / ____ / ____ Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1250	12.37	1748 µS	5.6	328			
1315	10.27	1806 µS	8.5	57.7			
1340	9.84	2.78 mS	9.0	67.3			
1400	9.67	2.81 mS	9.0	64.5			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: 12:40 Started blowing @ 20 GPM (450'),
13-bags of sand for packer
* Water level 1-28-10 @ 1250 = 212.50'
* SWL = 212.07' BtOC 1-30-10

Form completed by: Rod Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-195A Project Ross ISR
 Location NENW, SEC.19, T53N, R67W W.O.# 2009142-35
 Sample ID# 21-195A Date Sampled 1/29/10 Time 1250 am (pm)
 Describe Sampling Point 5" PVC WELL

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5" in

Date / / Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1215	8.70	971µS	6.1	140			
1230	8.67	974µS	7.1	76.5			
1250	8.73	984µS	7.2	73.5			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Started blowing @ 1150 - 29' - 1/2 GPM

* 7 bags of sand for packer

* SWL = 11.87' BTOC 1-30-10

Form completed by: Bob Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-195M Project ROSS ISR
 Location NENW, SEC. 19, T53N, R67W W.O.# _____
 Sample ID# 21-195M Date Sampled 1/12/10 Time 1700 am pm
 Describe Sampling Point 5" PVC Well

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
 Date ____/____/____ Time ____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1600	13.26	450mS	4.6	31.0			
1630	11.11	1675µS	6.9°C	15.46			
1700	10.71	1899	6.9°C	12.46			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Started blowing @ 1545 - 206PM - 303'

* 21 bags of sand for packer

* Water level 1-29-10 @ 1240 = 86.67'

* SWL = 85.52' BTOC 1-30-10

Form completed by: Rod Fuller Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point 34-18 DM Project Ross ISR
Location _____ W.O.# 2009 142 35
Sample ID# 34-18 DM Date Sampled 1 / 12 / 2010 Time 14:30 pm
Describe Sampling Point Discharge Pipe From Air-Lift Development

Well Depth 620 ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
Date ____ / ____ / ____ Time ____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
13:45	9.03	1066 µS	7.9	23.3			2.0
14:00	9.19	1044	15.7	60.4			1.0
14:15	9.33	1096	16.6	65.2			4.5
14:30	10.23	1066	15.9	99.1	Let recover 4 minutes		4.3

Pumping Start Time 13:15 WL _____ Pumping End Time 14:30 WL _____

Comments: Temp increase as compressor heats up

* SWL = 271.42' BTCL 1-29-10

Form completed by: _____ Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 OZ Project Ross ISR
Location _____ W.O.# 2009 142 35
Sample ID# 34-18 OZ Date Sampled 1 / 10 / 2010 Time _____ am pm
Describe Sampling Point Discharge Pipe from Air-Lift Development

Well Depth 56.5 ft below MP Depth to Water (below MP) 258.43 Casing Diameter 5 in
Date 1 / 12 / 2010 Time 9:25 ~~am~~ ~~pm~~ Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____

' Tap ' Bailer _____ Grab

Pump intake or bailer set at 440 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>16:25</u>							<u>~ 15-20</u>
<u>16:40</u>	<u>9.95</u>	<u>1069 µS</u>	<u>9.3</u>	<u>703</u>			<u>15</u>
<u>16:50</u>	<u>10.78</u>	<u>1058</u>	<u>12.4</u>	<u>139 ?</u>			<u>13</u>
<u>17:00</u>	<u>10.82</u>	<u>1012</u>	<u>13.2</u>	<u>537</u>			<u>15</u>
<u>17:15</u>	<u>10.73</u>	<u>1345</u>	<u>14.2</u>	<u>750</u>			<u>15</u>
<u>17:30</u>	<u>10.61</u>	<u>1686</u>	<u>15.3</u>	<u>508</u>			<u>15 ~</u>

Pumping Start Time 16:25 WL _____ Pumping End Time 17:30 WL _____

Comments: _____

* SWL = 284.78' BTOC 1-31-10

Form completed by: _____ Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 SA Project 2009 142 35 RossISR
 Location _____ W.O.# _____
 Sample ID# 34-18 SA Date Sampled 1 / 14 / 2010 Time 11:15 am
 Describe Sampling Point Discharge pipe from air-lift development

Well Depth 72 ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
 Date ____ / ____ / ____ Time ____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump Air lift grab
 Tap Bailer _____

Pump intake or bailer set at 70 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
10:20							~1.5
10:30	9.66	1054 μS	18.8	608			~1.0 or less
10:50	9.92	1040 μS	14.3	895			2.5
11:15	10.17	1081	9.2	905			1.2

Pumping Start Time 10:10 WL _____ Pumping End Time 11:15 WL _____

Comments: at 10:30 blew dry! Lower stringer into screen interval + blew
blew dry & let recover - repeated to collect turbid sample
* SWL = DRY BTOTC 1-29-10

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 SM Project 2009 142 35 Ross ISR

Location _____ W.O.# _____

Sample ID# 34-18 SM Date Sampled 1 / 14 / 2010 Time 12:45 pm

Describe Sampling Point Discharge Pipe from air-lift development

Well Depth 298 ft below MP Depth to Water (below MP) 140.68 ft Casing Diameter 5 in

Date 1 / 14 / 2010 Time 10:25 am Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ☐ Submersible pump ☒ Air-lift Grab

☐ Tap ☐ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
12:15	12.37	15.42	8.2	283			1.5 - 2.0
12:20	11.32	1292	7.9	293			2.10
12:25	10.83	1268	8.6	309			2.75
12:30	10.71	1297	10.0	245			2.5
12:45	10.64	1325	10.6	114			2.5

Pumping Start Time 12:10 WL _____ Pumping End Time 12:45 WL _____

Comments: Blew for 2.5 hrs yesterday & was pretty clean

* SWL = 136.70 BTDC 1-29-10

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7 DM Project ROSS ISR
 Location NENE section 18 Creek Co W.O.# 2009 142 35
 Sample ID# 34-7 DM Date Sampled 12/5/09 Time 15:30 pm
 Describe Sampling Point Air Lift Discharge water from completed well

Well Depth 485 ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 " in
 Date ____/____/____ Time ____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump Air-Lift
 ' Tap ' Bailer _____

Pump intake or bailer set at 465 ft below MP.

Tubing (type: Drill Pipe). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
15:10	9.37	1150	14.5				~ 1/2
15:20	9.55	1190	14.3				
15:30	9.59	1130	14.0	399		~ 45	

Pumping Start Time 14:00 WL _____ Pumping End Time 15:30 WL _____

Comments: Med Turbid, brown to tan brown very cold

* SWL = 87.43' BTOC 1-31-10

Form completed by: _____ Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-70Z Project ROSS ISR
Location SESE, SEC 7, T53N, R67W W.O.# 2009142-35
Sample ID# _____ Date Sampled 1 130 10 Time 1340 am (pm)
Describe Sampling Point 5" PVC Well

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
Date / / Time _____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

gpm
x 0.00223

cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1300	9.80	2.95mS	8.8	73.7			
1320	9.32	3.06mS	9.5	31.6			
1340	9.13	3.05mS	9.6	24.5			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Started blowing @ 1240 - 350' - 30 GPM
* SWL = 86.53' BTOC 1-31-10
* 26 bags of sand for packer
* Collected 30 GAL H₂O for vegetation test 1-30-10 @ 1400

Form completed by: Bob Fuller Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point 34-7 SA Project ROSS ISR
Location Crook Co. WY W.O.# 2009 142 35
Sample ID# 34-7 SA Date Sampled 12 / 12 / 09 Time _____ am pm
Describe Sampling Point Discharge from Air-Lift Development

Well Depth 5.3 ft below MP Depth to Water (below MP) 23.05 ft Casing Diameter .5 in
Date 12 / 13 / 09 Time 08:25 am Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump Grab
Tap Bailer _____ Air-Lift Development

Pump intake or bailer set at 4 ft below MP.

Tubing (type: 1 1/2" Galvanized) (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for all wells!

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

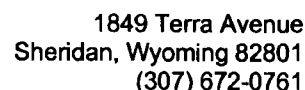
Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
12:40	10.03	1053	18.4	Turbid			.5 gpm
12:52	10.33	1039	18.1	Turbid			.5 gpm
13:05	10.60	1011	12.2	75.3			.5
13:15	10.65	990	14.0	39.9			.5
13:30	10.66	930	14.0	33.2			.5
13:45	10.71	925	13.9	30.4		50	.5

Pumping Start Time 12:05 WL _____ Pumping End Time 13:45 WL _____

Comments: _____

* SWL = 22.94' BTOL 1-31-10

Form completed by: Mike Wolf, WYPG#614 Witnessed by: _____



Sampling Point 34-7 SM Project ROSS ISR
Location Crook Co., WY W.O.# _____
Sample ID# 34-7 SM Date Sampled 12 / 11 / 09 Time 16:00 ☒ am ☐ pm
Describe Sampling Point Discharge from Air-Lift Development

Well Depth 245 ft below MP Depth to Water (below MP) 57.07 ft Casing Diameter 5 in

Date 12 / 12 / 09 Time 8:28 (am) Casing Volume _____ gal

Sampling method	Submersible pump	Grab
Tap	Bailer	Air-lift

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

Time	PH (units)	Temperature Corrected Conductance (μ mhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
15:15	12.48	1409	10.8	—			8-10
15:25	11.79	1183	11.8	37.9			
15:40	11.25	1272	12.1	26.4			8-10
15:50	11.21	1490	12.3	20.4			
16:00	11.10	1510	12.5	21.3	?	~700	8-10

Pumping Start Time 14:50 WL Pumping End Time 16:05 WL ?

Comments:

* SWL = 56.76' BTOL 1-31-10

Form completed by: M. W. W. Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19DM Project ROSS FSR
Location SENE, S19, T53N, R16W W.O.# 09142.35
Sample ID# 42-19DM Date Sampled 12 / 30 / 09 Time 17:30 am pm
Describe Sampling Point 5" Well

Well Depth 620' ft below MP Depth to Water (below MP) ~300 ft Casing Diameter 5 in
Date 12 / 30 / 09 Time _____ am pm Casing Volume 1500 gal

At least N/A bore volumes have been evacuated before sampling

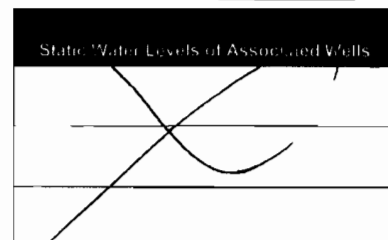
Sampling method Submersible pump N/A

Tap Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____



EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
16:25	10.66	1204	2.6*	378	-	-	-
17:00	10.19	983	6.4	363	-	-	-
17:20	9.82	1012	13.5	472	-	-	-

*Temp skewed due to Ambient Air @ ~10°F
Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: SAMPLED DURING DEVELOPMENT OF WELL; STARTED @ 3-5 gpm THEN DOWN TO ~1-2 gpm

* SWL = 286.58' BTWC 1-29-10

Form completed by: BOB SCHIFFER LAB COC #: _____



1849 Terra Avenue
Sheridan, Wyoming 82801
(307) 672-0761

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SAMPLING INFORMATION

Sampling Point 42-19 OZ Project ROSS ISR
Location SE NE sec 19 T53N R67W W.O.# 2009 142 35
Sample ID# 42-19 OZ Date Sampled 12/21/09 Time _____ am pm
Describe Sampling Point Discharge pipe from Air-Lift Development

Well Depth 560 ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
Date ____/____/____ Time ____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump Air-Lift
Tap Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
17:15	10.72	1809 μS	16.0	921			6.5
17:20	10.69	1824	17.6	947			6.0
17:25	10.66	1808	18.1	915			5.0
17:30	10.61	1841	18.6	933			4.0
17:45	10.67	1785	19.1	947			4.5

Pumping Start Time 16:30 WL _____ Pumping End Time 17:45 WL _____

Comments: No water was introduced during screen installation because no filter was installed. Very Turbid, warming. I packed a little to deep - pull up + E-log to verify depth. JPacker at 57 feet / SWL = 298.19' BTOC 1-29-10

Form completed by: Mike Wolf Witnessed by: _____

"Did Not Sample"

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SAMPLING INFORMATION

Sampling Point 42-19SA Project BOSS ISR
 Location SENE, S19, T53N, R67W W.O.# 09142.24
 Sample ID# 42-19SA Date Sampled 1 19 10 Time 13:15 am pm
 Describe Sampling Point 5" WELL

Well Depth 107 ft below MP Depth to Water (below MP) — ft Casing Diameter 5 in
 Date 1 1 Time — am pm Casing Volume — gal

At least — bore volumes have been evacuated before sampling

Sampling method ☒ Submersible pump N/A

☐ Tap ☐ Bailer —

Pump intake or bailer set at — ft below MP.

Tubing (type: —). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for —

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
12:30	10.21	1291	5.4	02	<u>—</u>	<u>—</u>	<u>—</u>
12:35	10.06	1289	7.1	969	<u>—</u>	<u>—</u>	<u>—</u>
12:50	10.14	1315	11.7	598	<u>—</u>	<u>—</u>	<u>—</u>
13:00	10.12	1351	13.7	513	<u>—</u>	<u>—</u>	<u>—</u>
13:15	10.11	1410	15.1	630	<u>—</u>	<u>—</u>	<u>—</u>

Pumping Start Time — WL — Pumping End Time — WL —

Comments: STARTED AIR-LIFT @ 12:15; MAKING ~ 1 gpm,
DISSOLVED METALS NOT FIELD FILTERED, REINSTATED FOR LAB
→ NOT PRESERVED & LAB FILTERED - SAMPLES AT 13:15
SWL = DRY BTOC 1-29-10

Form completed by: — LAB COC #: —

SAMPLING INFORMATION

Sampling Point 42-19SM Project Ross ISR
Location SENE, S19, T53N, R67W W.O.# 09142
Sample ID# 42-19SM Date Sampled 1 / 5 / 10 Time 17:00 am pm
Describe Sampling Point 5" Well

Well Depth 290' ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
Date 10 / 1 / 10 Time _____ am pm Casing Volume _____ gal

At least N/A bore volumes have been evacuated before sampling

Sampling method Submersible pump N/A
Tap Bailer _____

Pump intake or bailer set at _____ ft below MP.

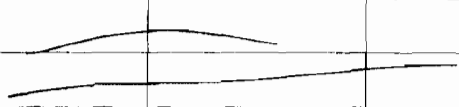
Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
16:00	10.35	1435	20.1°	44.6	—	—	—
16:45	10.83	1301	13.8	OR			
17:00	10.53	1308	15.3	882			

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: LET SIT For 30 min, yield down to ~5 gpm, Sampled AT 17:00, peristaltic WOULDNT WORK ∴ DISSOLVED METALS NOT FILTERED or preserved
* SWL = ~~290'~~ BLOC 1-29-10

Form completed by: BW Schaffer Witnessed by: Scott Holt

SAMPLING INFORMATION

Sampling Point Hose from 1 HP Pump Project Ross ISR
 Location _____ W.O.# 2009 142 35
 Sample ID# 12-18 DM Date Sampled 3 / 10 / 10 Time 15:00 pm
 Describe Sampling Point _____

Well Depth 632 ft below MP Depth to Water (below MP) 175.99ft Casing Diameter 5'4.3" in
 Date 3 / 9 / 10 Time 09:26 am Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft) <u>DO</u>	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
13:40	12.82	4.24 µS	11.6/11.1	10.70	24.1/		~6.0
13:55	12.94	4.17 µS	11.7/11.2	13.55	23.2/		3.5
14:10	12.80	3.82 µS	11.7/11.4	24.3	26.3/		3.0
14:25	12.71	3.59 µS	11.8/11.4	24.6	41.2/4.44		2.5
14:45					48.5/5.08		2.5
15:00	12.64	3.40 µS	10.9/10.5	21.7	48.5/5.08		

Pumping Start Time 12:30 WL 176 Pumping End Time 15:00 WL _____

Comments: 1 HP pump set yesterday ; rate at startup = 7.5 gpm
at 13:00 rate = 50 sec / 5 gal = 6 gpm ; at 13:55 rate is 5 gal in 105 sec
Air Bubbles at 14:35 - shut off pump + let Recover Till 14:50 then collect sample

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point Hose From 2HP Pump Project ROSS ISR
Location _____ W.O.# 2009 142 35
Sample ID# 12-18 OZ Date Sampled 3 / 10 / 2010 Time 12:10 am pm
Describe Sampling Point _____

Well Depth 584 ft below MP Depth to Water (below MP) 169.93 ft Casing Diameter 5" to 47# in
Date 3 / 9 / 2010 Time 09:30 am ~~pm~~ Casing Volume 48315 gal

At least 6.5 bore volumes have been evacuated before sampling

Sampling method Submersible pump 2HP
' Tap _____ ' Bailer _____

Pump intake or bailer set at 580 ft below MP.

Tubing (type: PVC+Garden Hose). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	<u>DO</u> Water Level (meters below 1 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
10:45	8.86	1900 uS	13.5/11.0	1.06	24.0	1495	23
11:55	9.02	1822 uS	11.0/11.1	2.06	26.3	1725	23
12:05	8.99	1812	10.9/11.1	1.18	26.4	1955	23

Pumping Start Time 10:40 WL 169.9 Pumping End Time 12:15 WL ?

Comments: Pump installed yesterday
Initial pump rate = 5 gal in 12 sec = 25 gpm; at 11:00 rate = 5 gal in 13 sec = 23 gpm

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-185A Project ROSS ISR
Location _____ W.O.# 09142.03
Sample ID# 12-185A Date Sampled 3 123 10 Time _____ am ☒ pm
Describe Sampling Point 5" PVC well

Well Depth _____ ft below MP Depth to Water (below MP) 50.69 ft Casing Diameter 5 in
Date 3 123 10 Time 1420 am ☒ pm Casing Volume 52 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump Radi-Flow
' Tap _____ ' Bailer _____

Pump intake or bailer set at 90 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1450	- started pump -						
1510	12.68	1560 µS	10.8				2.5
1520	9.82	823	11.1				2.5
1525	- Ran out of						
1600	9.92	789 µS	10.2				1.0
1630	9.65	811	11.8	4.94			1.0

Pumping Start Time 1450 WL 50.69 Pumping End Time 1630 WL _____

Comments: D.O. = 6.14 mg/l, 57.4% ; Water clear - No odor

Form completed by: R. Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point Hose from Pump Discharge Project Ross ISR
Location _____ W.O.# 2009 142-35
Sample ID# 12-18 SM Date Sampled 3 / 11 / 2010 Time 11:30 (am) ☒
Describe Sampling Point Discharge from pump through 50 garden hose

Well Depth 352 ft below MP Depth to Water (below MP) 88.89 ft Casing Diameter 5" + 3" in
Date 3 / 9 / 2010 Time 09:35 am pm Casing Volume 360 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump 1/2 HP Goulds
Tap Bailer _____

Pump intake or bailer set at 312 ft below MP.

Tubing (type: PVC & Garden Hose (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

5.0 gpm
x 0.00223
____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	<u>50</u> Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
09:45	9.36	1475 uS	12.5/11.2	2.69	9.6/0.99	~ 330	5.17
10:20	9.31	1474 uS	11.7/10.9	5.79	14.0/1.4	~ 505	5.00
10:45	9.35	1468	11.4/11.0	3.96	12.1/1.33	630	5.0
11:15	9.27	1478	11.4/10.9	3.63	21.1/2.3	780	5.0
11:30	9.25	1487	11.4/11.0	1.99	32.1/3.33	855	5.0

Pumping Start Time 8:45 WL _____ Pumping End Time _____ WL _____

Comments: Initial discharge = 50 sec/5 gals = 6 gpm at 9:00 rate still 6 gpm.
at 9:25 rate = 5 gal/55 sec = 5.45 gpm ; 9:45 rate = 58 sec/5 gal = 5.17
10:20 rate = 5 gal in 60 sec = 5.0 gpm.

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18 DM Project ROSS ISR
Location _____ W.O.# 2009142-24
Sample ID# 14-18 DM Date Sampled 3 129 10 Time 12 30 am pm
Describe Sampling Point 5" PVC Well

Well Depth 575 ft below MP Depth to Water (below MP) 157.17 ft Casing Diameter 5 in
Date 3 124 10 Time 0955 am pm Casing Volume 418 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 1HP GF
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm

x 0.00223

cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0930	10.71	2.83 mS	11.1°C	7.15		136	6.8
1030	10.69	2.80 mS	11.5	31.3		204	3.0
1045 1130	<u>- Ran out of water - Let recharge</u>					45	
1130	10.57	2.80 mS	11.5	122			
1130							

Pumping Start Time 0910 WL _____ Pumping End Time _____ WL _____

Comments: D.O. = 2.72 mg/l, 25.1%

Form completed by: Rob Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point Monitor Well 14-180Z Project Ross ISR
 Location SWSW sec 18 T53N R67W W.O.# _____
 Sample ID# 14-180Z Date Sampled 3/25/10 Time _____ am pm
 Describe Sampling Point Discharge Hose from 2 HP submersible pump

Well Depth _____ ft below MP Depth to Water (below MP) 158.10 ft Casing Diameter 5 in
 Date 3/24/10 Time 10:00 am Screen 400 - 529 = 30'
 Casing Volume 350 gal
 : 3 case vol = 1050

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 2 HP Grundfos
 ' Tap ' Bailer _____

Pump intake or bailer set at 480 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1325	9.50	3.66 mS	11.5	108			12.0
1340	9.55	3.59 mS	11.2	159			
1355	9.47	3.59 mS	11.2	225	1.93 mg/l / 17.7%		
1400	9.42	3.63 mS	11.1	154	↓		

Pumping Start Time 12:25 WL _____ Pumping End Time _____ WL _____

Comments: initial rate = 17 sec / 5 gal = 23 gpm ; 12:33 17 sec / 5 gal = 17.6 gpm v. turbid
12:40 rate = 22 sec / 5 gal = 13.6 gpm ; 12:53 rate = 23 sec / 5 gal = 13.0 gpm ; 13:05 24 sec / 5 gal = 12.5 sandy
13:15 25 sec / 5 gal = 12.0 gpm

Form completed by: _____ Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-185A Project _____

Location _____ W.O.# _____

Sample ID# 14-185A Date Sampled 3 / 24 / 10 Time 1300 am pm

Describe Sampling Point _____

Well Depth 40 ft below MP Depth to Water (below MP) 23.28 ft Casing Diameter 5 in

Date 3 / 24 / 10 Time 1150 am pm Casing Volume 17 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method Submersible pump Redi-Flow

Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm

x 0.00223

_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1215	9.07	1853µS	10.6	2.73			1.5
1245	9.94	1791µS	10.6	0.76			2.0
1300	9.93	1791µS	10.4	0.49			2.0

Pumping Start Time 1200 WL _____ Pumping End Time _____ WL _____

Comments: D.O. = 3.50mg/l / 31.8% ; Water clear - no odor

Form completed by: And Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18 SM Project ROSS ISR
Location _____ W.O.# 2009142-24
Sample ID# 14-18 SM Date Sampled 3 129 110 Time 1230 am ☒ pm
Describe Sampling Point 5" PVC WELL

Well Depth 285 ft below MP Depth to Water (below MP) 66.87 ft Casing Diameter 5 in
Date 3 124 110 Time 0957 ~~1000~~ am ☒ pm Casing Volume 218 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method Submersible pump 1/2 HP GF
Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1000							6.25
1100	9.87	1519 µS	10.3	2.46			6.25
1200	9.71	1566 µS	10.8	6.04			6.25
1230	9.56	1569 µS	10.8	2.53			6.00
TD							

Pumping Start Time 1000 WL _____ Pumping End Time 1240 WL _____

Comments: D.O. = 2.39 mg/L, 21.3%

Form completed by: Rod Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point Discharge Hose from 1HP pump Project Ross ISR
 Location NE NW section 19 W.O.# 2009 142 24
 Sample ID# 21-19 DM Date Sampled 3 / 24 / 2010 Time _____ am pm
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) 196.48ft Casing Diameter _____ in
 Date 3 / 24 / 2010 Time 09:00 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 1HP Ground For
 ' Tap ' Bailer _____

Pump intake or bailer set at 520 ft below MP. Screen 550-565

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1330	10.32	2.76 μS	10.8	32.4			
<u>D.O. = 2.80 mg/l / 25.2%</u>							

Pumping Start Time 11:35 WL _____ Pumping End Time _____ WL _____

Comments: Rate at start = 5 gal in 50 sec = 6 gpm; 11:45 5 gal in 55 sec; 11:56 5 gal in 65 sec
@ 12:10 rate = 80 sec for 5 gal = 3.75 gpm; 12:25 rate = 100 sec / 5 gal = 3 gpm; 12:40 rate = 200 sec / 150 gal
Drawdown to pump at 12:50 - No Flow, shut off pump at 12:50

Form completed by: Mike Wolf, Josh Fuller Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point Monitor Well 21-190Z Project Ross ISR
 Location NE NW sec 19, T53N R 67W W.O.# 2009 142 24
 Sample ID# 21-19 0Z Date Sampled 3 / 25 / 10 Time 11:00 am
 Describe Sampling Point Discharge hose from 2 HP Grundfos pump

Well Depth _____ ft below MP Depth to Water (below MP) 216.63 ft Casing Diameter 5" in
 Date 3 / 24 / 10 Time 09:07 am Screen 433-468 = 35 x .367 c
 Casing Volume 230 gal

At least _____ bore volumes have been evacuated before sampling _____

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at 410 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	DO Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
10:50	9.16	3.02 µS	10.9/10.7	7.59	31.8/4.08		15.0
10:55	9.15	2.99	11.0/10.6	8.95	21.5/2.36		
11:00	9.11	3.02	11.0/10.6	9.07	23.0/2.31		

Pumping Start Time 10:04 WL 216.6 Pumping End Time _____ WL _____

Comments: rate at startup 18 sec/5 gal; 10:10 rate = 5 gal in 19 sec = 15.8 gpm
at 10:45 rate = 5 gal in 20 sec = 15 gpm. Split sample IML/PACE

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-195A Project ROSS ISR
 Location _____ W.O.# 2009142-35
 Sample ID# 21-195A Date Sampled 3 / 24 / 2010 Time 1115 (am) pm
 Describe Sampling Point 5" PVC WELL

Well Depth 30 ft below MP Depth to Water (below MP) 10.56 ft Casing Diameter 5 in
 Date 3 / 24 / 10 Time 0910 (am) pm Casing Volume 19.5 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method Submersible pump redi-Flow
 ' Tap _____ ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1030	8.13	980µS	9.6°C	3.94			1.0
1100	8.08	975µS	10.6	0.89			1.0
1115	8.08	973µS	10.2	0.27			1.0

Pumping Start Time 1015 WL _____ Pumping End Time 1115 WL 19'

Comments: D.O. = 4.69 mg/l / 42.2% ; Water clear - no odor

Form completed by: Rod Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point Monitor Well 21-19 SM Project Ross ISR
Location NE NW sec 19 T53N R67W W.O.# 2009 142 24
Sample ID# 21-19 SM Date Sampled 3/24/10 Time 12:00 noon am
Describe Sampling Point Discharge Hose from 1/2 HP Grundfos Pump

Well Depth 316 ft below MP Depth to Water (below MP) 85.07 ft Casing Diameter 5 in
Date 3/24/10 Time 09:10 am Screen = 55' 3"
∴ 300 gal = 555 gal Casing Volume 185 gal 1.5

At least 3+ bore volumes have been evacuated before sampling

Sampling method Submersible pump 1/2 HP Grundfos
Tap Bailer

Pump intake or bailer set at 240 ft below MP. screen 260-315

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

6.0 gpm
x 0.00223
cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
11:27	10.26	1871	10.26	1.98	<u>3</u>	780	6.0
11:40	10.19	1851	10.8/10.1	3.20	22.0/2.4	875	6.0
11:45	10.18	1877	10.5/10.2	2.93	18.0/7.9	905	6.0
11:50	10.17	1874	10.5/10.2	4.06	15.0/1.66	935	6.0

Pumping Start Time 13:55 - off WL 14:35 = 40 min at 5.5 gpm = 220 gal Pumping End Time on 8:30 off at 10:00 await sampling WL

Comments: initial rate = 45 sec/5 gal = 6.7 gpm; 14:02 rate = 5 gal in 45 sec = 6.7 gpm; 14:15 46 sec/5 gal
14:27 rate = 50 sec/5 gal = 6.0 gpm, stop at 14:35 on 3/24/10; 3/25/10 restart at 8:30 at 6.7 gpm
9:00 rate = 5 gal/50 sec = 6.0 gpm at 9:10 DTW = 118', at 9:18 DTW = 119' stabilized?

11:24 start Pump to sample

Form completed by: Mike Wolf

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point _____ Project ROSS ISR

Location _____ W.O.# 09 142 24

Sample ID# 34-18 DM Date Sampled 3 / 17 / 10 Time 14:00 ~~am~~ pm

Describe Sampling Point _____

Screen 600 - 620 = 20' X 0.367 gal/ft =

Well Depth 620 ft below MP Depth to Water (below MP) 269.85 ft Casing Diameter 5" 43" in

Date 3 / 10 / 10 Time 10:16 am ~~pm~~ Casing Volume 338 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 1HP Grundfos

' Tap ' Bailer _____

Pump intake or bailer set at 570 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm

x 0.00223

_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
11:00	12.87	3.56 μ S	14.2/11.8	7.87	23/2.25		2.8 gpm
11:25	Discharge went to truckle - shut pump off + let recover						5 gal in 15 sec 1.9 gpm
14:00	12.91	3.38 μ S	11.9/11.2	23.3	36.0/3.9		2.5 to 1.0

Pumping Start Time 10:00 WL _____ Pumping End Time _____ WL _____

Comments: rate at 10:02 = 50 sec for 5 gal = 6 gpm ; at 10:10 rate = 5 gal in 54 sec = 5.5 gpm
rate at 10:30 = 5 gal in 70 sec = 4.2 gpm ; connect to XD ; read 124.30 ; @ 10:42 XD = 110.39
10:57 rate = 10 sec for 5 gal = 2.8 gpm ; XD = 102.33 ; 11:28 XD = 29.91 ; 11:28 rate went to truckle, shut off
Collected Duplicate 0100 at 12:00 (actually at 14:00), pump on at 13:45, rate 2.5 gpm

Form completed by: Mike Wolf Witnessed by: _____



WWCENGINEERING

1849 Terra Avenue
Sheridan, Wyoming 82801
(307) 672-0761

1st Try 3/17/10 pump didn't work

SAMPLING INFORMATION

Sampling Point _____ Project ROSS ISR

Location _____ W.O.# 09 142 24

Sample ID# 34-180Z Date Sampled 3 / 17 / 10 Time _____ am pm

Describe Sampling Point 3/4" Hose on discharge from submersible pump
Screen 460 - 565' - 105' x .367 gal/ft = 38.5 gallons

Well Depth 565 ft below MP Depth to Water (below MP) 278.31 ft Casing Diameter 5" x 3" in

Date 3 / 10 / 10 Time 10:12 am Casing Volume 220.2 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____

' Tap ' Bailer 2HP Grundfos

Pump intake or bailer set at 430 ft below MP.

DISCHARGE RATE

_____ gpm

x 0.00223

cfs

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
Unable to Pump on this date!							

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Also collect duplicate 0100, no pump didn't run

Form completed by: Mike Wolf Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point 34-1802 Project ROSS ISR
 Location _____ W.O.# _____
 Sample ID# 34-1802 Date Sampled 3 129 12010 Time 0830 (am) pm
 Describe Sampling Point _____

Well Depth 460 ft below MP Depth to Water (below MP) 278.31 ft Casing Diameter 5 in
 Date 3 1 10 1 10 Time 10:12 (am) pm Casing Volume 600 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0730							13 gal/min
0800	9.73	2.80 mS	10.6	45.1			13 gal/min
0815	9.57	2.82 mS	10.4	39.2			13
0830	9.39	2.83 mS	10.4	45.8			

Pumping Start Time 0730 WL _____ Pumping End Time 0830 WL _____

Comments: D.O. = 2.40 mg/l, 22.0%

Form completed by: Bob Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 SA Project ROSS FSP
 Location _____ W.O.# 2009142-35
 Sample ID# 34-18 SA Date Sampled 3/23/10 Time 1400 am ☒ pm
 Describe Sampling Point 5" PVC WELL

Well Depth _____ ft below MP Depth to Water (below MP) DRY ft Casing Diameter 5 in
 Date 3/23/2010 Time 1400 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Well is dry!

Form completed by: D. Fuller Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point _____ Project Ross ISR
Location _____ W.O.# 09 142 24
Sample ID# 34-18 SM Date Sampled 3 / 17 / 10 Time 13:00 ☒ AM ☐ PM

Describe Sampling Point _____

Screen 278-298 = 20' x 0.367 gal/ft =

Well Depth 298 ft below MP Depth to Water (below MP) 136.25 ft Casing Diameter 5" + 3" in

Date 3 / 10 / 10 Time 10:20 ☒ AM ☐ PM Casing Volume 149.3 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 1/2 HP Grundfos

' Tap ' Bailer _____

Pump intake or bailer set at 250 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm

x 0.00223

cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	DO - Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
12:10	12.49	1926 µS	13.1/10.5	33.9	64.1/6.68	~ 95 gal	~ 5
13:00	12.82	3.36 µS	11.0/10.5	7.06	14.0/1.55	105	

Pumping Start Time 10:00 WL _____ Pumping End Time _____ WL _____

Comments: rate at 10:02 55 sec for 5 gal = 5.45 gpm 10:10 rate is 5 gal in 66 sec = 4.5 gpm
10:16 XD = 29.62, Pumped dry at 10:17 - unplug pump & let recover
11:06 XD = 36.41 feet, 11:23 XD = 41.41' ; Pump on 12:08 - 12:10 - check FP XD = 41.96 after
13:25 XD = 46.84

Form completed by: Snake Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7DM Project ROSS ISR
 Location _____ W.O.# _____
 Sample ID# 34-7DM Date Sampled 3 / 30 / 10 Time 1130 am pm
 Describe Sampling Point _____

Well Depth 472 ft below MP Depth to Water (below MP) 85.33 ft Casing Diameter 5 in
 Date 3 / 24 / 10 Time 1045 am pm Casing Volume 386 gal 1160

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 1HP GF
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0900							6.25
1000	10.40	3.80MS	10.9	22.8			4.20
1022	- Ran out of water - let recharge						
1130	10.85	4.00MS	11.6	45.2			

Pumping Start Time 0900 WL _____ Pumping End Time 1130 WL _____
 Comments: D.O. : 7.66 mg/l, 76.0%

Form completed by: Dee Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-702 Project ROSS ISR
 Location _____ W.O.# _____
 Sample ID# 34-702 Date Sampled 3 130 110 Time 0845 (am) pm
 Describe Sampling Point _____

Well Depth 235 ft below MP Depth to Water (below MP) 89.54 ft Casing Diameter 5 in
 Date 3 124 110 Time 1058 (am) pm Casing Volume 235 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 2hp GF
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>0745</u>							<u>21.0</u>
<u>0800</u>	<u>9.40</u>	<u>2.97mS</u>	<u>10.4</u>	<u>4.38</u>			<u>21.0</u>
<u>0830</u>	<u>9.28</u>	<u>2.95mS</u>	<u>10.2</u>	<u>2.43</u>			<u>21.0</u>
<u>0845</u>	<u>9.20</u>	<u>2.98mS</u>	<u>10.1</u>	<u>2.94</u>			<u>21.0</u>

Pumping Start Time 0745 WL _____ Pumping End Time 0845 WL _____

Comments: D.O. = 4.26 mg/L, 38.6%

Form completed by: Rod Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-75A Project ROSS ISR
 Location _____ W.O.# _____
 Sample ID# 34-75A Date Sampled 3 / 25 / 10 Time 1020 am pm
 Describe Sampling Point _____

Well Depth 52 ft below MP Depth to Water (below MP) 22.55 ft Casing Diameter 5 in
 Date 3 / 25 / 10 Time 0830 am pm Casing Volume 30 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method Submersible pump Redi-Flow
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0930	10.00	1182 µS	10.4	3.09		40	1.0
1000	9.76	1222 µS	10.6	1.20	41.32	70	1.0
1020	9.70	1229 µS	10.4	0.66	41.73	90	1.0

Pumping Start Time 0850 WL _____ Pumping End Time _____ WL _____

Comments: Water clear - no odor ; D.O. = 3.35 mg/l, 30.3%

Form completed by: Rob Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-75m Project ROSS ISR
 Location _____ W.O.# 2009142-
 Sample ID# 34-75m Date Sampled 3 1 30 1 10 Time 1045 (am) pm
 Describe Sampling Point _____

Well Depth 210 ft below MP Depth to Water (below MP) 56.73 ft Casing Diameter 5 in
 Date 3 1 24 1 10 Time 1048 (am) pm Casing Volume 153 gal 460

At least 3+ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 1/2 HP GF
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0930							6.8
0945	10.93	1792µS	10.2	26.9			6.8
1015	10.10	1757µS	10.2	48.6			6.0
1045	9.82	1788µS	10.6	19.97			6.0

Pumping Start Time 0930 WL _____ Pumping End Time _____ WL _____

Comments: D.O. = 2.63 mg/l / 23.1%

Form completed by: Rad Fulda Witnessed by: _____

SAMPLING INFORMATION

Sampling Point _____ Project ROSS ISR
 Location Discharge W.O.# 09 142 24
 Sample ID# 42-19 DM Date Sampled 3 / 16 / 10 Time 14:10 am pm
 Describe Sampling Point 3/4" Discharge from 1 HP submersible pump

Well Depth 610 ft below MP Depth to Water (below MP) 282.01 ft Casing Diameter 5 1/2 in
 Date 3 / 10 / 10 Time 09:06 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' 1 HP Grundfos
 ' Tap ' Bailer _____

Pump intake or bailer set at 570 ft below MP.

Tubing (type: SCH 80 PVC). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____	gpm
x _____	
	0.00223
	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	<u>DO</u> Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
13:50	12.59	2.86 uS	13.5/11.5	7.38	23.0/2.44		
14:00	12.66	2.88 uS	11.5/11.1	7.17	17.0/1.84		
14:05	12.67	2.88 uS	11.4/10.9	7.21	17.5/1.88		
14:10	12.66	2.89 uS	11.3/10.9	6.98	17.4/1.86		

Pumping Start Time 13:10 WL _____ Pumping End Time 14:10 WL _____

Comments: rate dropped off to 5 gal in 120 sec, little foamy

Form completed by: Nike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point Hose from pump discharge Project ROSS ISR
Location _____ W.O.# 2009 142 35
Sample ID# 42-19 0Z Date Sampled 3 11 10 Time 13:30 ☒ am ☒ pm
Describe Sampling Point Garden Hose from 2 HP Goulds Pump

Well Depth 560 ft below MP Depth to Water (below MP) 299.9 ft Casing Diameter 5" in
Date 3 19 10 Time 9:31 am pm Casing Volume 203 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ☒ Submersible pump 2 HP Goulds
☐ Tap ☐ Bailer _____

Pump intake or bailer set at 440 ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	DO Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
12:30	9.32	1869	11.5/10.9	19.8	20.7/2.25	285	9.5/8.6
12:45	9.18	2.69 mS	11.5/11.0	8.98	18.2/1.98	415	8.6 ^{9.2/1 sec} 5/35 sec
13:00	9.08	2.78 mS	11.4/10.9	7.36	17.8/1.95	545	8.6 ^{5.2/1 sec} 5/35 sec
13:15	9.06	2.80 mS	11.5/11.1	5.33	15.9/1.73	675	8.6
13:30	9.12	2.83 mS	10.6/10.9	4.41	21.2/2.29	800	8.6

Pumping Start Time 12:00 WL _____ Pumping End Time 13:40 WL _____

Comments: Initial rate = 5 gal in 28 sec = 10.7 gpm; at 12:15 rate = 5 gal in 32 sec or 9.38 gpm
at 12:30 rate = 5 gal in 35 sec = 8.6 gpm
Sample minor effervescent!

Samples foamy! At Start Not Foamy at time of sample

Form completed by: Mike Wolf Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 SA Project ROSS ISR
 Location _____ W.O.# _____
 Sample ID# 42-19 SA Date Sampled 3 / 23 / 2010 Time 1345 am pm
 Describe Sampling Point 5" PVC WELL

Well Depth _____ ft below MP Depth to Water (below MP) DRY ft Casing Diameter 5 in
 Date 3 / 23 / 2010 Time 1345 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Well is dry.

Form completed by: R. Fuller Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point _____ Project Ross ISR
 Location _____ W.O.# 09 142 24
 Sample ID# 42-19SM Date Sampled 3 / 16 / 10 Time 14:50 ~~am~~ pm
 Describe Sampling Point 3/4" Garden Hose on discharge from submersible pump.

Well Depth 290 ft below MP Depth to Water (below MP) 155.65 ft Casing Diameter 5" x 3" in
 Date 3 / 10 / 10 Time 09:34 am ~~pm~~ Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump

Tap

Bailer

1/2 HP Grundfos

Pump intake or bailer set at 230 ft below MP.

Tubing (type: SCH 80 PVC). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for this well

DISCHARGE RATE

_____ gpm

x 0.00223

cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	DO Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
14:50	12.34	1897	11.3/10.8	40.2	30.2/3.3		

Pumping Start Time 13:10 WL _____ Pumping End Time _____ WL _____

Comments: Dry at 13:26 shut off pump (unplug) - Let recover to 14:40
rate at 13:15 = 5 gal in 48 sec, at 13:20 rate = 5 gal in 56 sec,
Pump on at 14:40 collect sample 14:50

Form completed by:

Mike Wolf

Witnessed by:



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912335001

Project: ROSS ISR
Lab ID: S0912335-001
Client Sample ID: 12-18 DM
COC: 131121

Work Order: S0912335
Collection Date: 12/17/2009 9:00:00 PM
Date Received: 12/19/2009 12:43:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	10.4	0.1		s.u.	12/23/2009 1435 KO	SM 4500 H B
Electrical Conductivity	1600	5		µmhos/cm	12/23/2009 1435 KO	SM 2510B
Total Dissolved Solids (180)	950	10		mg/L	12/23/2009 1355 AMB	SM 2540
Solids, Total Dissolved (Calc)	1010	10		mg/L	01/04/2010 917 KO	SM 1030E
Alkalinity, Total (As CaCO3)	780	5		mg/L	12/23/2009 1435 KO	SM 2320B
Nitrogen, Ammonia (As N)	2.6	0.1		mg/L	12/30/2009 1825 SK	EPA 350.1
Gross Alpha	11.1 ± 2.9	2		pCi/L	01/13/2010 000 SH	SM 7110B
Gross Beta	55.1 ± 4.8	4.11		pCi/L	01/13/2010 000 SH	SM 7110B
Radium 226	ND	1		pCi/L	01/08/2010 1318 SH	SM 7500-Ra B
Total Radium 228	ND	5		pCi/L	01/12/2010 2108 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO3	145	5		mg/L	12/23/2009 1435 KO	SM 2320B
Alkalinity, Carbonate as CO3	397	5		mg/L	12/23/2009 1435 KO	SM 2320B
Chloride	12	1		mg/L	12/29/2009 1222 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	12/23/2009 1435 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	12/31/2009 1303 SK	EPA 353.2
Sulfate	69	1		mg/L	12/29/2009 1222 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	12/24/2009 859 DG	EPA 200.7
Magnesium	1	1		mg/L	12/24/2009 859 DG	EPA 200.7
Potassium	74	1		mg/L	12/24/2009 859 DG	EPA 200.7
Sodium	379	1		mg/L	12/24/2009 859 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO3	2.37	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Carbonate as CO3	13.22	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Chloride	0.33	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Sulfate	1.44	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Calcium	0.22	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Potassium	1.89	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Sodium	16.48	0.01		meq/L	01/04/2010 917 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

Page 1 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912335001

Project: ROSS ISR
Lab ID: S0912335-001
Client Sample ID: 12-18 DM
COC: 131121

Work Order: S0912335
Collection Date: 12/17/2009 9:00:00 PM
Date Received: 12/19/2009 12:43:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	18.69	0		meq/L	01/04/2010 917 KO	SM 1030E
Anion Sum	17.38	0		meq/L	01/04/2010 917 KO	SM 1030E
Cation-Anion Balance	3.62	0		%	01/04/2010 917 KO	SM 1030E
Dissolved Metals						
Aluminum	0.9	0.1		mg/L	12/24/2009 859 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	12/28/2009 1258 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/28/2009 1258 MS	EPA 200.8
Boron	0.2	0.1		mg/L	12/24/2009 859 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/28/2009 1258 MS	EPA 200.8
Chromium	0.01	0.01		mg/L	12/24/2009 859 DG	EPA 200.7
Copper	0.01	0.01		mg/L	12/28/2009 1258 MS	EPA 200.8
Iron	0.20	0.05		mg/L	12/24/2009 859 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/28/2009 1258 MS	EPA 200.8
Mercury	ND	0.001		mg/L	12/29/2009 727 BK	EPA 245.1
Molybdenum	0.11	0.02		mg/L	12/28/2009 1258 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/24/2009 859 DG	EPA 200.7
Selenium	ND	0.005		mg/L	12/28/2009 1258 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	12/28/2009 1258 MS	EPA 200.8
Vanadium	0.03	0.02		mg/L	12/28/2009 1258 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	12/24/2009 859 DG	EPA 200.7
Total Metals						
Iron	2.68	0.05		mg/L	12/29/2009 1148 DG	EPA 200.7
Manganese	0.06	0.02		mg/L	12/29/2009 1148 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: *Connie Mattson*
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912263001

Project: ROSS ISR
Lab ID: S0912263-001
Client Sample ID: 12-18 OZ
COC: 131120

Work Order: S0912263
Collection Date: 12/16/2009 6:00:00 PM
Date Received: 12/17/2009 8:00:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	8.7	0.1		s.u.	12/21/2009 1751 KO	SM 4500 H B
Electrical Conductivity	2280	5		µmhos/cm	12/21/2009 1751 KO	SM 2510B
Total Dissolved Solids (180)	1630	10		mg/L	12/19/2009 1415 AMB	SM 2540
Solids, Total Dissolved (Calc)	1580	10		mg/L	12/29/2009 1008 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	516	5		mg/L	12/21/2009 1751 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	12/30/2009 1727 SK	EPA 350.1
Gross Alpha	237 ± 11	2		pCi/L	01/13/2010 000 SH	SM 7110B
Gross Beta	48.6 ± 4.7	4.12		pCi/L	01/13/2010 000 SH	SM 7110B
Radium 226	15.86 ± 0.52	0.2		pCi/L	12/29/2009 1831 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/09/2010 111 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	579	5		mg/L	12/21/2009 1751 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	25	5		mg/L	12/21/2009 1751 KO	SM 2320B
Chloride	7	1		mg/L	12/19/2009 022 KO	EPA 300.0
Fluoride	0.7	0.1		mg/L	12/21/2009 1751 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	12/22/2009 1715 SK	EPA 353.2
Sulfate	712	1		mg/L	12/19/2009 022 KO	EPA 300.0
Cations						
Calcium	10	1		mg/L	12/18/2009 1652 DG	EPA 200.7
Magnesium	3	1		mg/L	12/18/2009 1652 DG	EPA 200.7
Potassium	7	1		mg/L	12/18/2009 1652 DG	EPA 200.7
Sodium	529	1		mg/L	12/18/2009 1652 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.48	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Carbonate as CO ₃	0.83	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Chloride	0.20	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Sulfate	14.82	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Calcium	0.48	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Magnesium	0.22	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Potassium	0.17	0.01		meq/L	12/29/2009 1008 KO	SM 1030E
Sodium	23.01	0.01		meq/L	12/29/2009 1008 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912263001

Project: ROSS ISR
Lab ID: S0912263-001
Client Sample ID: 12-18 OZ
COC: 131120

Work Order: S0912263
Collection Date: 12/16/2009 6:00:00 PM
Date Received: 12/17/2009 8:00:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	23.89	0		meq/L	12/29/2009 1008 KO	SM 1030E
Anion Sum	25.39	0		meq/L	12/29/2009 1008 KO	SM 1030E
Cation-Anion Balance	3.05	0		%	12/29/2009 1008 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	12/18/2009 1652 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	12/18/2009 1609 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/18/2009 1609 MS	EPA 200.8
Boron	0.5	0.1		mg/L	12/18/2009 1652 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/18/2009 1609 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/18/2009 1652 DG	EPA 200.7
Copper	ND	0.01		mg/L	12/18/2009 1609 MS	EPA 200.8
Iron	0.21	0.05		mg/L	12/18/2009 1652 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/18/2009 1609 MS	EPA 200.8
Mercury	ND	0.001		mg/L	12/22/2009 1041 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	12/18/2009 1609 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/18/2009 1652 DG	EPA 200.7
Selenium	ND	0.005		mg/L	12/18/2009 1609 MS	EPA 200.8
Uranium	0.092	0.001		mg/L	12/18/2009 1609 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	12/18/2009 1609 MS	EPA 200.8
Zinc	0.05	0.01		mg/L	12/18/2009 1652 DG	EPA 200.7
Total Metals						
Iron	0.34	0.05		mg/L	12/21/2009 2301 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	12/21/2009 2301 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Page 2 of 2



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/13/2010
Report ID: S0912334001

Project: ROSS ISR
Lab ID: S0912334-001
Client Sample ID: 12-18 SA
COC: 131123

Work Order: S0912334
Collection Date: 12/20/2009 12:00:00 PM
Date Received: 12/21/2009 8:35:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	9.0	0.1		s.u.	12/23/2009 1455 KO	SM 4500 H B
Electrical Conductivity	871	5		µmhos/cm	12/23/2009 1455 KO	SM 2510B
Total Dissolved Solids (180)	580	10		mg/L	12/23/2009 1350 AMB	SM 2540
Solids, Total Dissolved (Calc)	560	10		mg/L	01/06/2010 634 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	371	5		mg/L	12/23/2009 1455 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	12/30/2009 1824 SK	EPA 350.1
Gross Alpha	7.4 ± 2.2	2		pCi/L	01/13/2010 000 SH	SM 7110B
Gross Beta	15.8 ± 2.8	3		pCi/L	01/13/2010 000 SH	SM 7110B
Radium 226	0.26 ± 0.09	0.2		pCi/L	01/08/2010 1318 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/09/2010 111 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	361	5		mg/L	12/23/2009 1455 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	45	5		mg/L	12/23/2009 1455 KO	SM 2320B
Chloride	10	1		mg/L	12/29/2009 1210 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	12/23/2009 1455 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	12/31/2009 1302 SK	EPA 353.2
Sulfate	102	1		mg/L	12/29/2009 1210 KO	EPA 300.0
Cations						
Calcium	18	1		mg/L	01/05/2010 1907 DG	EPA 200.7
Magnesium	15	1		mg/L	12/31/2009 1220 DG	EPA 200.7
Potassium	15	1		mg/L	01/05/2010 1907 DG	EPA 200.7
Sodium	179	1		mg/L	01/05/2010 1907 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.92	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Carbonate as CO ₃	1.50	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Chloride	0.28	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Sulfate	2.12	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Calcium	0.89	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Magnesium	1.19	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Potassium	0.39	0.01		meq/L	01/06/2010 634 KO	SM 1030E
Sodium	7.80	0.01		meq/L	01/06/2010 634 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

Page 1 of 2



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/13/2010
Report ID: S0912334001

Project: ROSS ISR
Lab ID: S0912334-001
Client Sample ID: 12-18 SA
COC: 131123

Work Order: S0912334
Collection Date: 12/20/2009 12:00:00 PM
Date Received: 12/21/2009 8:35:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	10.28	0		meq/L	01/06/2010 634 KO	SM 1030E
Anion Sum	9.85	0		meq/L	01/06/2010 634 KO	SM 1030E
Cation-Anion Balance	2.10	0		%	01/06/2010 634 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	12/24/2009 857 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	12/28/2009 1247 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/28/2009 1247 MS	EPA 200.8
Boron	ND	0.1		mg/L	12/24/2009 857 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/28/2009 1247 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/24/2009 857 DG	EPA 200.7
Copper	ND	0.01		mg/L	12/28/2009 1247 MS	EPA 200.8
Iron	ND	0.05		mg/L	12/24/2009 857 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/28/2009 1247 MS	EPA 200.8
Mercury	ND	0.001		mg/L	12/29/2009 722 BK	EPA 245.1
Molybdenum	0.02	0.02		mg/L	12/28/2009 1247 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/24/2009 857 DG	EPA 200.7
Selenium	ND	0.005		mg/L	12/28/2009 1247 MS	EPA 200.8
Uranium	0.005	0.001		mg/L	12/28/2009 1247 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	12/28/2009 1247 MS	EPA 200.8
Zinc	ND	0.01		mg/L	12/24/2009 857 DG	EPA 200.7
Total Metals						
Iron	5.71	0.05		mg/L	12/29/2009 1143 DG	EPA 200.7
Manganese	0.09	0.02		mg/L	12/29/2009 1143 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Page 2 of 2



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912335001

Project: ROSS ISR
Lab ID: S0912335-002
Client Sample ID: 12-18 SM
COC: 131121

Work Order: S0912335
Collection Date: 12/18/2009 3:45:00 PM
Date Received: 12/19/2009 12:43:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	9.2	0.1		s.u.	12/23/2009 1446 KO	SM 4500 H B
Electrical Conductivity	1480	5		µmhos/cm	12/23/2009 1446 KO	SM 2510B
Total Dissolved Solids (180)	960	10		mg/L	12/23/2009 1400 AMB	SM 2540
Solids, Total Dissolved (Calc)	930	10		mg/L	01/04/2010 917 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	549	5		mg/L	12/23/2009 1446 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	12/30/2009 1826 SK	EPA 350.1
Gross Alpha	6.7 ± 2.7	2		pCi/L	01/13/2010 000 SH	SM 7110B
Gross Beta	12.3 ± 3.7	3.85		pCi/L	01/13/2010 000 SH	SM 7110B
Radium 226	0.38 ± 0.11	0.2		pCi/L	01/08/2010 1318 SH	SM 7500-Ra B
Total Radium 228	1.24 ± 0.71	1		pCi/L	01/12/2010 2108 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	506	5		mg/L	12/23/2009 1446 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	81	5		mg/L	12/23/2009 1446 KO	SM 2320B
Chloride	4	1		mg/L	12/29/2009 1234 KO	EPA 300.0
Fluoride	1.7	0.1		mg/L	12/23/2009 1446 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	12/31/2009 1304 SK	EPA 353.2
Sulfate	245	1		mg/L	12/29/2009 1234 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	12/31/2009 1222 DG	EPA 200.7
Magnesium	1	1		mg/L	12/24/2009 902 DG	EPA 200.7
Potassium	15	1		mg/L	12/24/2009 902 DG	EPA 200.7
Sodium	331	1		mg/L	12/24/2009 902 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.29	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Carbonate as CO ₃	2.69	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Chloride	0.10	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Sulfate	5.09	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Calcium	0.17	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Magnesium	0.11	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Potassium	0.37	0.01		meq/L	01/04/2010 917 KO	SM 1030E
Sodium	14.38	0.01		meq/L	01/04/2010 917 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912335001

Project: ROSS ISR
Lab ID: S0912335-002
Client Sample ID: 12-18 SM
COC: 131121

Work Order: S0912335
Collection Date: 12/18/2009 3:45:00 PM
Date Received: 12/19/2009 12:43:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	15.04	0		meq/L	01/04/2010 917 KO	SM 1030E
Anion Sum	16.27	0		meq/L	01/04/2010 917 KO	SM 1030E
Cation-Anion Balance	3.94	0		%	01/04/2010 917 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	12/24/2009 902 DG	EPA 200.7
Arsenic	0.015	0.005		mg/L	12/28/2009 1308 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/28/2009 1308 MS	EPA 200.8
Boron	0.5	0.1		mg/L	12/24/2009 902 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/28/2009 1308 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/24/2009 902 DG	EPA 200.7
Copper	ND	0.01		mg/L	12/28/2009 1308 MS	EPA 200.8
Iron	ND	0.05		mg/L	12/24/2009 902 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/28/2009 1308 MS	EPA 200.8
Mercury	ND	0.001		mg/L	12/29/2009 729 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	12/28/2009 1308 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/24/2009 902 DG	EPA 200.7
Selenium	ND	0.005		mg/L	12/28/2009 1308 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	12/28/2009 1308 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	12/28/2009 1308 MS	EPA 200.8
Zinc	ND	0.01		mg/L	12/24/2009 902 DG	EPA 200.7
Total Metals						
Iron	1.10	0.05		mg/L	12/29/2009 1153 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	12/29/2009 1153 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001306001

Project: ROSS
Lab ID: S1001306-001
Client Sample ID: 14-18 DM
COC: 128060

Work Order: S1001306
Collection Date: 1/21/2010 4:45:00 PM
Date Received: 1/22/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.12			s.u.	01/21/2010 1645	Field
Conductivity	1872			µmhos/cm	01/21/2010 1645	Field
Turbidity	83.5			NTU	01/21/2010 1645	Field
Temperature	9.6			°C	01/21/2010 1645	Field
General Parameters						
pH	9.6	0.1		s.u.	01/26/2010 1452 KO	SM 4500 H B
Electrical Conductivity	1770	5		µmhos/cm	01/26/2010 1452 KO	SM 2510B
Total Dissolved Solids (180)	1160	10		mg/L	01/26/2010 1350 AMB	SM 2540
Solids, Total Dissolved (Calc)	1080	10		mg/L	01/28/2010 1048 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	500	5		mg/L	01/26/2010 1452 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.2	0.1		mg/L	02/03/2010 1544 SK	EPA 350.1
Gross Alpha	7.6 ± 2.7	2		pCi/L	01/28/2010 000 SH	SM 7110B
Gross Beta	31.5 ± 4.3	4.10		pCi/L	01/28/2010 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	02/04/2010 1917 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/06/2010 205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	318	5		mg/L	01/26/2010 1452 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	144	5		mg/L	01/26/2010 1452 KO	SM 2320B
Chloride	176	1		mg/L	01/26/2010 1341 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	01/26/2010 1452 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/28/2010 1115 SK	EPA 353.2
Sulfate	152	1		mg/L	01/26/2010 1341 KO	EPA 300.0
Cations						
Calcium	7	1		mg/L	01/26/2010 1939 DG	EPA 200.7
Magnesium	2	1		mg/L	01/26/2010 1939 DG	EPA 200.7
Potassium	46	1		mg/L	01/26/2010 1939 DG	EPA 200.7
Sodium	400	1		mg/L	01/26/2010 1939 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001306001

Project: ROSS
Lab ID: S1001306-001
Client Sample ID: 14-18 DM
COC: 128060

Work Order: S1001306
Collection Date: 1/21/2010 4:45:00 PM
Date Received: 1/22/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.20	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Carbonate as CO ₃	4.79	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Chloride	4.96	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Sulfate	3.15	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Calcium	0.36	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Magnesium	0.18	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Potassium	1.17	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Sodium	17.38	0.01		meq/L	01/28/2010 1048 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.10	0		meq/L	01/28/2010 1048 KO	SM 1030E
Anion Sum	18.17	0		meq/L	01/28/2010 1048 KO	SM 1030E
Cation-Anion Balance	2.50	0		%	01/28/2010 1048 KO	SM 1030E
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	01/26/2010 1939 DG	EPA 200.7
Arsenic	0.010	0.005		mg/L	01/26/2010 1210 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/26/2010 1210 MS	EPA 200.8
Boron	0.4	0.1		mg/L	01/26/2010 1939 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/26/2010 1210 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/26/2010 1939 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/26/2010 1210 MS	EPA 200.8
Iron	0.15	0.05		mg/L	01/26/2010 1939 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/26/2010 1210 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 926 BK	EPA 245.1
Molybdenum	0.10	0.02		mg/L	01/26/2010 1210 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/26/2010 1939 DG	EPA 200.7
Selenium	0.016	0.005		mg/L	01/26/2010 1210 MS	EPA 200.8
Uranium	0.004	0.001		mg/L	01/26/2010 1210 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/26/2010 1210 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/26/2010 1939 DG	EPA 200.7
Total Metals						
Iron	2.12	0.05		mg/L	01/27/2010 1618 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	01/27/2010 1618 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/29/2010
Report ID: S1001180001

Project: ROSS ISR
Lab ID: S1001180-001
Client Sample ID: 14-180Z
COC: 107703

Work Order: S1001180
Collection Date: 1/15/2010 12:45:00 PM
Date Received: 1/18/2010 8:15:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.92			s.u.	01/15/2010 1245	Field
Conductivity	2500			µmhos/cm	01/15/2010 1245	Field
Turbidity	662			NTU	01/15/2010 1245	Field
Temperature	12.1			°C	01/15/2010 1245	Field
General Parameters						
pH	9.4	0.1		s.u.	01/19/2010 1513 KO	SM 4500 H B
Electrical Conductivity	2230	5		µmhos/cm	01/19/2010 1513 KO	SM 2510B
Total Dissolved Solids (180)	1600	10		mg/L	01/20/2010 1405 AMB	SM 2540
Solids, Total Dissolved (Calc)	1570	10		mg/L	01/27/2010 744 KO	SM 1030E
Alkalinity, Total (As CaCO3)	523	5		mg/L	01/19/2010 1513 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.9	0.1		mg/L	01/26/2010 1418 SK	EPA 350.1
Gross Alpha	166.4 ± 9.3	2		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	24.8 ± 4.2	4.10		pCi/L	01/28/2010 737 SH	SM 7110B
Radium 226	3.18 ± 0.22	0.2		pCi/L	01/27/2010 1623 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/28/2010 2335 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO3	432	5		mg/L	01/19/2010 1513 KO	SM 2320B
Alkalinity, Carbonate as CO3	101	5		mg/L	01/19/2010 1513 KO	SM 2320B
Chloride	8	1		mg/L	01/19/2010 1624 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	01/19/2010 1513 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/26/2010 1729 SK	EPA 353.2
Sulfate	661	1		mg/L	01/19/2010 1624 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	01/18/2010 1918 DG	EPA 200.7
Magnesium	2	1		mg/L	01/18/2010 1918 DG	EPA 200.7
Potassium	23	1		mg/L	01/18/2010 1918 DG	EPA 200.7
Sodium	551	1		mg/L	01/18/2010 1918 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/29/2010

Report ID: S1001180001

Project: ROSS ISR
Lab ID: S1001180-001
Client Sample ID: 14-180Z
COC: 107703

Work Order: S1001180
Collection Date: 1/15/2010 12:45:00 PM
Date Received: 1/18/2010 8:15:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.08	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Carbonate as CO ₃	3.36	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Chloride	0.23	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Sulfate	13.76	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Calcium	0.31	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Magnesium	0.20	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Potassium	0.59	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Sodium	23.97	0.01		meq/L	01/27/2010 744 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	25.09	0		meq/L	01/27/2010 744 KO	SM 1030E
Anion Sum	24.48	0		meq/L	01/27/2010 744 KO	SM 1030E
Cation-Anion Balance	1.22	0		%	01/27/2010 744 KO	SM 1030E
Dissolved Metals						
Aluminum	0.3	0.1		mg/L	01/18/2010 1918 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	01/19/2010 1204 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/19/2010 1204 MS	EPA 200.8
Boron	0.4	0.1		mg/L	01/18/2010 1918 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/19/2010 1204 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/18/2010 1918 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/19/2010 1204 MS	EPA 200.8
Iron	0.11	0.05		mg/L	01/18/2010 1918 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/19/2010 1204 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/19/2010 1122 DJ	EPA 245.1
Molybdenum	0.05	0.02		mg/L	01/19/2010 1204 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/18/2010 1918 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/19/2010 1204 MS	EPA 200.8
Uranium	0.090	0.001		mg/L	01/19/2010 1204 MS	EPA 200.8
Vanadium	0.02	0.02		mg/L	01/19/2010 1204 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/18/2010 1918 DG	EPA 200.7
Total Metals						
Iron	12.8	0.05		mg/L	01/19/2010 2059 DG	EPA 200.7
Manganese	0.24	0.02		mg/L	01/19/2010 2059 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001287001

Project: ROSS ISR
Lab ID: S1001287-001
Client Sample ID: 14-18SA
COC: 131197

Work Order: S1001287
Collection Date: 1/23/2010 10:50:00 AM
Date Received: 1/25/2010 8:10:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.90			s.u.	01/23/2010 1050	Field
Conductivity	2410			µmhos/cm	01/23/2010 1050	Field
Turbidity	44.6			NTU	01/23/2010 1050	Field
Temperature	6.1			°C	01/23/2010 1050	Field
General Parameters						
pH	9.3	0.1		s.u.	01/25/2010 1350 KO	SM 4500 H B
Electrical Conductivity	1700	5		µmhos/cm	01/25/2010 1350 KO	SM 2510B
Total Dissolved Solids (180)	1200	10		mg/L	01/25/2010 1620 AMB	SM 2540
Solids, Total Dissolved (Calc)	1100	10		mg/L	01/28/2010 1345 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	381	5		mg/L	01/25/2010 1350 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1554 SK	EPA 350.1
Gross Alpha	8.8 ± 3.0	2		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	11.9 ± 3.9	4.12		pCi/L	01/28/2010 737 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	02/04/2010 1645 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/06/2010 205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	317	5		mg/L	01/25/2010 1350 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	73	5		mg/L	01/25/2010 1350 KO	SM 2320B
Chloride	71	1		mg/L	01/25/2010 2004 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	01/25/2010 1350 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.4	0.1		mg/L	01/28/2010 1119 SK	EPA 353.2
Sulfate	370	1		mg/L	01/25/2010 2004 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	01/27/2010 1502 DG	EPA 200.7
Magnesium	5	1		mg/L	01/27/2010 1502 DG	EPA 200.7
Potassium	18	1		mg/L	01/25/2010 2237 DG	EPA 200.7
Sodium	402	1		mg/L	01/27/2010 1502 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001287001

Project: ROSS ISR
Lab ID: S1001287-001
Client Sample ID: 14-18SA
COC: 131197

Work Order: S1001287
Collection Date: 1/23/2010 10:50:00 AM
Date Received: 1/25/2010 8:10:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.19	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Carbonate as CO ₃	2.42	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Chloride	1.99	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Sulfate	7.69	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Calcium	0.29	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Magnesium	0.44	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Potassium	0.46	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Sodium	17.47	0.01		meq/L	01/28/2010 1345 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.68	0		meq/L	01/28/2010 1345 KO	SM 1030E
Anion Sum	17.32	0		meq/L	01/28/2010 1345 KO	SM 1030E
Cation-Anion Balance	3.75	0		%	01/28/2010 1345 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/25/2010 2237 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	01/25/2010 1452 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/25/2010 1452 MS	EPA 200.8
Boron	0.1	0.1		mg/L	01/25/2010 2237 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/25/2010 1452 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/25/2010 2237 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/25/2010 1452 MS	EPA 200.8
Iron	0.07	0.05		mg/L	01/25/2010 2237 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/25/2010 1452 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 921 BK	EPA 245.1
Molybdenum	0.06	0.02		mg/L	01/25/2010 1452 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/25/2010 2237 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/25/2010 1452 MS	EPA 200.8
Uranium	0.006	0.001		mg/L	01/25/2010 1452 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/25/2010 1452 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/25/2010 2237 DG	EPA 200.7
Total Metals						
Iron	4.08	0.05		mg/L	01/26/2010 2137 DG	EPA 200.7
Manganese	0.11	0.02		mg/L	01/26/2010 2137 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001307001

Project: ROSS ISR
Lab ID: S1001307-001
Client Sample ID: 14-18SM
COC: 131138

Work Order: S1001307
Collection Date: 1/22/2010 2:45:00 PM
Date Received: 1/22/2010 4:02:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.92			s.u.	01/22/2010 1445	Field
Conductivity	1673			µmhos/cm	01/22/2010 1445	Field
Turbidity	67.4			NTU	01/22/2010 1445	Field
Temperature	7.3			°C	01/22/2010 1445	Field
General Parameters						
pH	9.4	0.1		s.u.	01/26/2010 1558 KO	SM 4500 H B
Electrical Conductivity	1580	5		µmhos/cm	01/26/2010 1558 KO	SM 2510B
Total Dissolved Solids (180)	1070	10		mg/L	01/26/2010 1355 AMB	SM 2540
Solids, Total Dissolved (Calc)	1010	10		mg/L	01/28/2010 1049 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	572	5		mg/L	01/26/2010 1558 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1551 SK	EPA 350.1
Gross Alpha	6.4 ± 2.6	2		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	7.8 ± 3.6	3.93		pCi/L	01/28/2010 737 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	02/04/2010 1917 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/06/2010 205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	448	5		mg/L	01/26/2010 1558 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	123	5		mg/L	01/26/2010 1558 KO	SM 2320B
Chloride	3	1		mg/L	01/26/2010 1354 KO	EPA 300.0
Fluoride	1.6	0.1		mg/L	01/26/2010 1558 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/28/2010 1116 SK	EPA 353.2
Sulfate	245	1		mg/L	01/26/2010 1354 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	01/26/2010 1942 DG	EPA 200.7
Magnesium	1	1		mg/L	01/26/2010 1942 DG	EPA 200.7
Potassium	8	1		mg/L	01/26/2010 1942 DG	EPA 200.7
Sodium	403	1		mg/L	01/26/2010 1942 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001307001

Project: ROSS ISR
Lab ID: S1001307-001
Client Sample ID: 14-18SM
COC: 131138

Work Order: S1001307
Collection Date: 1/22/2010 2:45:00 PM
Date Received: 1/22/2010 4:02:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.35	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Carbonate as CO ₃	4.09	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Chloride	0.08	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Sulfate	5.10	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Calcium	0.21	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Potassium	0.20	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Sodium	17.52	0.01		meq/L	01/28/2010 1049 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.04	0		meq/L	01/28/2010 1049 KO	SM 1030E
Anion Sum	16.72	0		meq/L	01/28/2010 1049 KO	SM 1030E
Cation-Anion Balance	3.79	0		%	01/28/2010 1049 KO	SM 1030E
Dissolved Metals						
Aluminum	0.1	0.1		mg/L	01/26/2010 1942 DG	EPA 200.7
Arsenic	0.021	0.005		mg/L	01/26/2010 1221 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/26/2010 1221 MS	EPA 200.8
Boron	0.4	0.1		mg/L	01/26/2010 1942 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/26/2010 1221 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/26/2010 1942 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/26/2010 1221 MS	EPA 200.8
Iron	0.05	0.05		mg/L	01/26/2010 1942 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/26/2010 1221 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 928 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/26/2010 1221 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/26/2010 1942 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/26/2010 1221 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	01/26/2010 1221 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/26/2010 1221 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/26/2010 1942 DG	EPA 200.7
Total Metals						
Iron	2.66	0.05		mg/L	01/27/2010 1623 DG	EPA 200.7
Manganese	0.06	0.02		mg/L	01/27/2010 1623 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1001371001

Project: ROSS ISR
Lab ID: S1001371-002
Client Sample ID: 21-19DM
COC: 131199

Work Order: S1001371
Collection Date: 1/27/2010 3:00:00 PM
Date Received: 1/28/2010 4:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.21			s.u.	01/27/2010 1500	Field
Conductivity	2710			µmhos/cm	01/27/2010 1500	Field
Turbidity	91.1			NTU	01/27/2010 1500	Field
Temperature	10.4			°C	01/27/2010 1500	Field
General Parameters						
pH	9.8	0.1		s.u.	01/29/2010 1510 KO	SM 4500 H B
Electrical Conductivity	1950	5		µmhos/cm	01/29/2010 1510 KO	SM 2510B
Total Dissolved Solids (180)	1220	10		mg/L	01/28/2010 1805 AMB	SM 2540
Solids, Total Dissolved (Calc)	1120	10		mg/L	02/04/2010 734 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	562	5		mg/L	01/29/2010 1510 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.6	0.1		mg/L	02/03/2010 1648 SK	EPA 350.1
Gross Alpha	3.8 ± 2.3	2		pCi/L	02/09/2010 1148 SH	SM 7110B
Gross Beta	29.5 ± 4.1	4		pCi/L	02/09/2010 1148 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	02/16/2010 1409 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/17/2010 2008 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	319	5		mg/L	01/29/2010 1510 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	180	5		mg/L	01/29/2010 1510 KO	SM 2320B
Chloride	270	1		mg/L	01/29/2010 1632 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	01/29/2010 1510 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	02/08/2010 1335 SK	EPA 353.2
Sulfate	33	1		mg/L	01/29/2010 1632 KO	EPA 300.0
Cations						
Calcium	9	1		mg/L	02/01/2010 2047 DG	EPA 200.7
Magnesium	2	1		mg/L	02/01/2010 2047 DG	EPA 200.7
Potassium	40	1		mg/L	02/01/2010 2047 DG	EPA 200.7
Sodium	429	1		mg/L	02/01/2010 2047 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Page 3 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1001371001

Project: ROSS ISR
Lab ID: S1001371-002
Client Sample ID: 21-19DM
COC: 131199

Work Order: S1001371
Collection Date: 1/27/2010 3:00:00 PM
Date Received: 1/28/2010 4:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.22	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Carbonate as CO ₃	6.01	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Chloride	7.61	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Sulfate	0.69	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Calcium	0.43	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Magnesium	0.15	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Potassium	1.02	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Sodium	18.65	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.25	0		meq/L	02/04/2010 734 KO	SM 1030E
Anion Sum	19.60	0		meq/L	02/04/2010 734 KO	SM 1030E
Cation-Anion Balance	1.64	0		%	02/04/2010 734 KO	SM 1030E
Dissolved Metals						
Aluminum	0.1	0.1		mg/L	02/01/2010 2047 DG	EPA 200.7
Arsenic	0.008	0.005		mg/L	01/29/2010 1531 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/29/2010 1531 MS	EPA 200.8
Boron	0.6	0.1		mg/L	02/01/2010 2047 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/29/2010 1531 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/01/2010 2047 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/29/2010 1531 MS	EPA 200.8
Iron	0.08	0.05		mg/L	02/01/2010 2047 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/29/2010 1531 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 1151 BK	EPA 245.1
Molybdenum	0.04	0.02		mg/L	01/29/2010 1531 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/01/2010 2047 DG	EPA 200.7
Selenium	0.015	0.005		mg/L	01/29/2010 1531 MS	EPA 200.8
Uranium	ND	0.001		mg/L	01/29/2010 1531 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/29/2010 1531 MS	EPA 200.8
Zinc	ND	0.01		mg/L	02/01/2010 2047 DG	EPA 200.7
Total Metals						
Iron	1.98	0.05		mg/L	02/02/2010 109 DG	EPA 200.7
Manganese	0.11	0.02		mg/L	02/02/2010 109 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1001371001

Project: ROSS ISR
Lab ID: S1001371-001
Client Sample ID: 21-19OZ
COC: 131199

Work Order: S1001371
Collection Date: 1/26/2010 2:00:00 PM
Date Received: 1/28/2010 4:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.67			s.u.	01/26/2010 1400	Field
Conductivity	2810			µmhos/cm	01/26/2010 1400	Field
Turbidity	64.5			NTU	01/26/2010 1400	Field
Temperature	9.0			°C	01/26/2010 1400	Field
General Parameters						
pH	9.3	0.1		s.u.	01/29/2010 1500 KO	SM 4500 H B
Electrical Conductivity	2010	5		µmhos/cm	01/29/2010 1500 KO	SM 2510B
Total Dissolved Solids (180)	1540	10		mg/L	01/28/2010 1800 AMB	SM 2540
Solids, Total Dissolved (Calc)	1370	10		mg/L	02/04/2010 734 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	536	5		mg/L	01/29/2010 1500 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1647 SK	EPA 350.1
Gross Alpha	100.3 ± 7.3	2		pCi/L	02/09/2010 1148 SH	SM 7110B
Gross Beta	22.1 ± 4.1	4.10		pCi/L	02/09/2010 1148 SH	SM 7110B
Radium 226	0.81 ± 0.12	0.2		pCi/L	02/16/2010 1409 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/17/2010 2008 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	453	5		mg/L	01/29/2010 1500 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	99	5		mg/L	01/29/2010 1500 KO	SM 2320B
Chloride	5	1		mg/L	01/29/2010 1621 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	01/29/2010 1500 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	02/08/2010 1328 SK	EPA 353.2
Sulfate	517	1		mg/L	01/29/2010 1621 KO	EPA 300.0
Cations						
Calcium	5	1		mg/L	02/03/2010 1655 DG	EPA 200.7
Magnesium	1	1		mg/L	02/03/2010 1655 DG	EPA 200.7
Potassium	14	1		mg/L	02/03/2010 1655 DG	EPA 200.7
Sodium	501	1		mg/L	02/03/2010 1655 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1001371001

Project: ROSS ISR
Lab ID: S1001371-001
Client Sample ID: 21-19OZ
COC: 131199

Work Order: S1001371
Collection Date: 1/26/2010 2:00:00 PM
Date Received: 1/28/2010 4:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.42	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Carbonate as CO ₃	3.29	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Chloride	0.15	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Sulfate	10.76	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Calcium	0.26	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Magnesium	0.10	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Potassium	0.35	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Sodium	21.77	0.01		meq/L	02/04/2010 734 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	22.50	0		meq/L	02/04/2010 734 KO	SM 1030E
Anion Sum	21.66	0		meq/L	02/04/2010 734 KO	SM 1030E
Cation-Anion Balance	1.88	0		%	02/04/2010 734 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	02/01/2010 2045 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/29/2010 1520 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/29/2010 1520 MS	EPA 200.8
Boron	0.2	0.1		mg/L	02/01/2010 2045 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/29/2010 1520 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/01/2010 2045 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/29/2010 1520 MS	EPA 200.8
Iron	ND	0.05		mg/L	02/01/2010 2045 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/29/2010 1520 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 1146 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/29/2010 1520 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/01/2010 2045 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/29/2010 1520 MS	EPA 200.8
Uranium	0.037	0.001		mg/L	01/29/2010 1520 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/29/2010 1520 MS	EPA 200.8
Zinc	ND	0.01		mg/L	02/01/2010 2045 DG	EPA 200.7
Total Metals						
Iron	1.44	0.05		mg/L	02/02/2010 057 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	02/02/2010 057 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Page 2 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002002001

Project: ROSS ISR
Lab ID: S1002002-001
Client Sample ID: 21-19SA
COC: 131155

Work Order: S1002002
Collection Date: 1/29/2010 12:50:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.73			s.u.	01/29/2010 1250	Field
Conductivity	984			µmhos/cm	01/29/2010 1250	Field
Turbidity	73.5			NTU	01/29/2010 1250	Field
Temperature	7.2			°C	01/29/2010 1250	Field
General Parameters						
pH	8.5	0.1		s.u.	02/01/2010 1826 KO	SM 4500 H B
Electrical Conductivity	913	5		µmhos/cm	02/01/2010 1826 KO	SM 2510B
Total Dissolved Solids (180)	610	10		mg/L	02/01/2010 1345 AMB	SM 2540
Solids, Total Dissolved (Calc)	560	10		mg/L	02/04/2010 759 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	370	5		mg/L	02/01/2010 1826 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1713 SK	EPA 350.1
Gross Alpha	5.6 ± 1.5	2		pCi/L	02/09/2010 1148 SH	SM 7110B
Gross Beta	8.2 ± 1.9	3		pCi/L	02/09/2010 1148 SH	SM 7110B
Radium 226	0.26 ± 0.07	0.2		pCi/L	02/16/2010 1628 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/18/2010 023 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	427	5		mg/L	02/01/2010 1826 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	12	5		mg/L	02/01/2010 1826 KO	SM 2320B
Chloride	14	1		mg/L	02/01/2010 1909 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	02/01/2010 1826 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.1	0.1		mg/L	02/08/2010 1351 SK	EPA 353.2
Sulfate	110	1		mg/L	02/01/2010 1909 KO	EPA 300.0
Cations						
Calcium	35	1		mg/L	02/01/2010 2238 DG	EPA 200.7
Magnesium	15	1		mg/L	02/01/2010 2238 DG	EPA 200.7
Potassium	8	1		mg/L	02/01/2010 2238 DG	EPA 200.7
Sodium	159	1		mg/L	02/01/2010 2238 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Page 1 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002002001

Project: ROSS ISR
Lab ID: S1002002-001
Client Sample ID: 21-19SA
COC: 131155

Work Order: S1002002
Collection Date: 1/29/2010 12:50:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.00	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Carbonate as CO ₃	0.38	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Chloride	0.40	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Sulfate	2.29	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Calcium	1.72	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Magnesium	1.19	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Potassium	0.20	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Sodium	6.90	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.01	0		meq/L	02/04/2010 759 KO	SM 1030E
Anion Sum	10.10	0		meq/L	02/04/2010 759 KO	SM 1030E
Cation-Anion Balance	0.46	0		%	02/04/2010 759 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	02/01/2010 2238 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	02/01/2010 1331 MS	EPA 200.8
Barium	ND	0.5		mg/L	02/01/2010 1331 MS	EPA 200.8
Boron	0.1	0.1		mg/L	02/01/2010 2238 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	02/01/2010 1331 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/01/2010 2238 DG	EPA 200.7
Copper	ND	0.01		mg/L	02/01/2010 1331 MS	EPA 200.8
Iron	0.06	0.05		mg/L	02/01/2010 2238 DG	EPA 200.7
Lead	ND	0.02		mg/L	02/01/2010 1331 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 1300 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	02/01/2010 1331 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/01/2010 2238 DG	EPA 200.7
Selenium	0.007	0.005		mg/L	02/01/2010 1331 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	02/01/2010 1331 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	02/01/2010 1331 MS	EPA 200.8
Zinc	0.30	0.01		mg/L	02/01/2010 2238 DG	EPA 200.7
Total Metals						
Iron	1.36	0.05		mg/L	02/02/2010 2336 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	02/02/2010 2336 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002033001

Project: ROSS ISR
Lab ID: S1002033-001
Client Sample ID: 21-19 SM
COC: 131156

Work Order: S1002033
Collection Date: 1/28/2010 5:00:00 PM
Date Received: 1/29/2010 7:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.71			s.u.	01/28/2010 1700	Field
Conductivity	1899			µmhos/cm	01/28/2010 1700	Field
Turbidity	12.46			NTU	01/28/2010 1700	Field
Temperature	6.9			°C	01/28/2010 1700	Field
General Parameters						
pH	10.2	0.1		s.u.	02/03/2010 1605 KO	SM 4500 H B
Electrical Conductivity	1750	5		µmhos/cm	02/03/2010 1605 KO	SM 2510B
Total Dissolved Solids (180)	1140	10		mg/L	02/02/2010 1610 AMB	SM 2540
Solids, Total Dissolved (Calc)	1060	10		mg/L	02/05/2010 820 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	556	5		mg/L	02/03/2010 1605 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1703 SK	EPA 350.1
Gross Alpha	8.3 ± 2.9	2		pCi/L	02/09/2010 1148 SH	SM 7110B
Gross Beta	21.7 ± 4.1	4.12		pCi/L	02/09/2010 1148 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	02/16/2010 1628 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/18/2010 023 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	160	5		mg/L	02/03/2010 1605 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	255	5		mg/L	02/03/2010 1605 KO	SM 2320B
Chloride	4	1		mg/L	02/03/2010 1109 KO	EPA 300.0
Fluoride	1.4	0.1		mg/L	02/03/2010 1605 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	02/10/2010 1503 SK	EPA 353.2
Sulfate	311	1		mg/L	02/03/2010 1109 KO	EPA 300.0
Cations						
Calcium	9	1		mg/L	02/02/2010 2140 DG	EPA 200.7
Magnesium	1	1		mg/L	02/02/2010 2140 DG	EPA 200.7
Potassium	28	1		mg/L	02/02/2010 2140 DG	EPA 200.7
Sodium	376	1		mg/L	02/02/2010 2140 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002033001

Project: ROSS ISR
Lab ID: S1002033-001
Client Sample ID: 21-19 SM
COC: 131156

Work Order: S1002033
Collection Date: 1/28/2010 5:00:00 PM
Date Received: 1/29/2010 7:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.61	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Carbonate as CO ₃	8.51	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Chloride	0.12	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Fluoride	0.07	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Sulfate	6.47	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Calcium	0.43	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Potassium	0.71	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Sodium	16.33	0.01		meq/L	02/05/2010 820 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.57	0		meq/L	02/05/2010 820 KO	SM 1030E
Anion Sum	17.80	0		meq/L	02/05/2010 820 KO	SM 1030E
Cation-Anion Balance	0.63	0		%	02/05/2010 820 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	02/02/2010 2140 DG	EPA 200.7
Arsenic	0.028	0.005		mg/L	02/02/2010 1439 MS	EPA 200.8
Barium	ND	0.5		mg/L	02/02/2010 1439 MS	EPA 200.8
Boron	0.1	0.1		mg/L	02/02/2010 2140 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	02/02/2010 1439 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/02/2010 2140 DG	EPA 200.7
Copper	ND	0.01		mg/L	02/02/2010 1439 MS	EPA 200.8
Iron	ND	0.05		mg/L	02/02/2010 2140 DG	EPA 200.7
Lead	ND	0.02		mg/L	02/02/2010 1439 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/05/2010 1118 DJ	EPA 245.1
Molybdenum	0.02	0.02		mg/L	02/02/2010 1439 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/02/2010 2140 DG	EPA 200.7
Selenium	ND	0.005		mg/L	02/02/2010 1439 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	02/02/2010 1439 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	02/02/2010 1439 MS	EPA 200.8
Zinc	ND	0.01		mg/L	02/02/2010 2140 DG	EPA 200.7
Total Metals						
Iron	0.48	0.05		mg/L	02/03/2010 1856 DG	EPA 200.7
Manganese	ND	0.02		mg/L	02/03/2010 1856 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/29/2010
Report ID: S1001125001

Project: ROSS ISR
Lab ID: S1001125-001
Client Sample ID: 34-18 DM
COC: 131129

Work Order: S1001125
Collection Date: 1/12/2010 2:30:00 PM
Date Received: 1/12/2010 3:44:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.23			s.u.	01/12/2010 1430	Field
Conductivity	1066			µmhos/cm	01/12/2010 1430	Field
Turbidity	99.1			NTU	01/12/2010 1430	Field
Temperature	15.9			°C	01/12/2010 1430	Field
General Parameters						
pH	9.1	0.1		s.u.	01/13/2010 1611 KO	SM 4500 H B
Electrical Conductivity	1060	5		µmhos/cm	01/13/2010 1611 KO	SM 2510B
Total Dissolved Solids (180)	740	10		mg/L	01/13/2010 1330 AMB	SM 2540
Solids, Total Dissolved (Calc)	690	10		mg/L	01/18/2010 1101 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	501	5		mg/L	01/13/2010 1611 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	01/13/2010 1054 KO	EPA 350.1
Gross Alpha	8.8 ± 2.5	2		pCi/L	01/18/2010 1748 SH	SM 7110B
Gross Beta	19.1 ± 2.9	3		pCi/L	01/18/2010 1748 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	01/27/2010 1623 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/28/2010 2335 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	506	5		mg/L	01/13/2010 1611 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	52	5		mg/L	01/13/2010 1611 KO	SM 2320B
Chloride	10	1		mg/L	01/14/2010 1740 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	01/13/2010 1611 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/26/2010 1703 SK	EPA 353.2
Sulfate	106	1		mg/L	01/14/2010 1740 KO	EPA 300.0
Cations						
Calcium	30	1		mg/L	01/13/2010 2039 DG	EPA 200.7
Magnesium	25	1		mg/L	01/13/2010 2039 DG	EPA 200.7
Potassium	23	1		mg/L	01/13/2010 2039 DG	EPA 200.7
Sodium	197	1		mg/L	01/13/2010 2039 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/29/2010
Report ID: S1001125001

Project: ROSS ISR
Lab ID: S1001125-001
Client Sample ID: 34-18 DM
COC: 131129

Work Order: S1001125
Collection Date: 1/12/2010 2:30:00 PM
Date Received: 1/12/2010 3:44:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.29	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Carbonate as CO ₃	1.72	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Chloride	0.28	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Sulfate	2.20	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Calcium	1.51	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Magnesium	2.07	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Potassium	0.58	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Sodium	8.56	0.01		meq/L	01/18/2010 1101 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.74	0		meq/L	01/18/2010 1101 KO	SM 1030E
Anion Sum	12.52	0		meq/L	01/18/2010 1101 KO	SM 1030E
Cation-Anion Balance	0.86	0		%	01/18/2010 1101 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/13/2010 2039 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/13/2010 1242 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/13/2010 1242 MS	EPA 200.8
Boron	0.1	0.1		mg/L	01/13/2010 2039 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/13/2010 1242 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/13/2010 2039 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/13/2010 1242 MS	EPA 200.8
Iron	0.08	0.05		mg/L	01/13/2010 2039 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/13/2010 1242 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/13/2010 1426 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/13/2010 1242 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/13/2010 2039 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/13/2010 1242 MS	EPA 200.8
Uranium	0.008	0.001		mg/L	01/13/2010 1242 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/13/2010 1242 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	01/13/2010 2039 DG	EPA 200.7
Total Metals						
Iron	3.62	0.05		mg/L	01/14/2010 2042 DG	EPA 200.7
Manganese	0.17	0.02		mg/L	01/14/2010 2042 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/29/2010
Report ID: S1001121001

Project: ROSS 2009 142 35
Lab ID: S1001121-001
Client Sample ID: 34-18 OZ
COC: 131128

Work Order: S1001121
Collection Date: 1/10/2010 5:30:00 PM
Date Received: 1/11/2010 2:11:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.61			s.u.	01/10/2010 1730	Field
Conductivity	1686			µmhos/cm	01/10/2010 1730	Field
Temperature	15.3			°C	01/10/2010 1730	Field
General Parameters						
pH	10.0	0.1		s.u.	01/13/2010 1518 KO	SM 4500 H B
Electrical Conductivity	1640	5		µmhos/cm	01/13/2010 1518 KO	SM 2510B
Total Dissolved Solids (180)	1130	10		mg/L	01/13/2010 1310 AMB	SM 2540
Solids, Total Dissolved (Calc)	1060	10		mg/L	01/18/2010 1055 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	459	5		mg/L	01/13/2010 1518 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.7	0.1		mg/L	01/13/2010 1053 KO	EPA 350.1
Gross Alpha	584 ± 17	2		pCi/L	01/19/2010 610 SH	SM 7110B
Gross Beta	81.7 ± 5.2	3.96		pCi/L	01/19/2010 610 SH	SM 7110B
Radium 226	3.74 ± 0.35	0.2		pCi/L	01/27/2010 1318 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/28/2010 2335 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	221	5		mg/L	01/13/2010 1518 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	167	5		mg/L	01/13/2010 1518 KO	SM 2320B
Chloride	9	1		mg/L	01/14/2010 1729 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	01/13/2010 1518 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/26/2010 1700 SK	EPA 353.2
Sulfate	360	1		mg/L	01/14/2010 1729 KO	EPA 300.0
Cations						
Calcium	9	1		mg/L	01/12/2010 1843 DG	EPA 200.7
Magnesium	2	1		mg/L	01/12/2010 1843 DG	EPA 200.7
Potassium	10	1		mg/L	01/12/2010 1843 DG	EPA 200.7
Sodium	396	1		mg/L	01/12/2010 1843 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/29/2010
Report ID: S1001121001

Project: ROSS 2009 142 35
Lab ID: S1001121-001
Client Sample ID: 34-18 OZ
COC: 131128

Work Order: S1001121
Collection Date: 1/10/2010 5:30:00 PM
Date Received: 1/11/2010 2:11:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	3.62	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Carbonate as CO ₃	5.55	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Chloride	0.25	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Sulfate	7.49	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Calcium	0.44	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Magnesium	0.16	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Potassium	0.25	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Sodium	17.21	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.07	0		meq/L	01/18/2010 1055 KO	SM 1030E
Anion Sum	16.95	0		meq/L	01/18/2010 1055 KO	SM 1030E
Cation-Anion Balance	3.21	0		%	01/18/2010 1055 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/12/2010 1843 DG	EPA 200.7
Arsenic	0.015	0.005		mg/L	01/13/2010 1239 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/13/2010 1239 MS	EPA 200.8
Boron	0.3	0.1		mg/L	01/12/2010 1843 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/13/2010 1239 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/12/2010 1843 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/13/2010 1239 MS	EPA 200.8
Iron	0.05	0.05		mg/L	01/12/2010 1843 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/13/2010 1239 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/13/2010 1424 BK	EPA 245.1
Molybdenum	0.05	0.02		mg/L	01/13/2010 1239 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/12/2010 1843 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/13/2010 1239 MS	EPA 200.8
Uranium	0.089	0.001		mg/L	01/13/2010 1239 MS	EPA 200.8
Vanadium	0.15	0.02		mg/L	01/13/2010 1239 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	01/12/2010 1843 DG	EPA 200.7
Total Metals						
Iron	6.93	0.05		mg/L	01/13/2010 2216 DG	EPA 200.7
Manganese	0.09	0.02		mg/L	01/13/2010 2216 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 2/1/2010
Report ID: S1001169001

Project: ROSS ISR
Lab ID: S1001169-001
Client Sample ID: 34-18 SA
COC: 128247

Work Order: S1001169
Collection Date: 1/14/2010 11:15:00 AM
Date Received: 1/14/2010 4:02:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.17			s.u.	01/14/2010 1115	Field
Conductivity	1081			µmhos/cm	01/14/2010 1115	Field
Turbidity	905			NTU	01/14/2010 1115	Field
Temperature	9.2			°C	01/14/2010 1115	Field
General Parameters						
pH	9.4	0.1		s.u.	01/15/2010 1406 KO	SM 4500 H B
Electrical Conductivity	1000	5		µmhos/cm	01/15/2010 1406 KO	SM 2510B
Total Dissolved Solids (180)	720	10		mg/L	01/15/2010 1145 AMB	SM 2540
Solids, Total Dissolved (Calc)	680	10		mg/L	01/20/2010 1105 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	469	5		mg/L	01/15/2010 1406 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	01/26/2010 1408 SK	EPA 350.1
Gross Alpha	12.3 ± 2.8	2		pCi/L	01/29/2010 547 SH	SM 7110B
Gross Beta	14.5 ± 2.8	3		pCi/L	01/29/2010 547 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	01/27/2010 1623 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/28/2010 2335 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	395	5		mg/L	01/15/2010 1406 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	87	5		mg/L	01/15/2010 1406 KO	SM 2320B
Chloride	12	1		mg/L	01/15/2010 1715 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	01/15/2010 1406 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/26/2010 1714 SK	EPA 353.2
Sulfate	132	1		mg/L	01/15/2010 1715 KO	EPA 300.0
Cations						
Calcium	19	1		mg/L	01/14/2010 2033 DG	EPA 200.7
Magnesium	11	1		mg/L	01/14/2010 2033 DG	EPA 200.7
Potassium	17	1		mg/L	01/14/2010 2033 DG	EPA 200.7
Sodium	211	1		mg/L	01/14/2010 2033 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 2/1/2010
Report ID: S1001169001

Project: ROSS ISR
Lab ID: S1001169-001
Client Sample ID: 34-18 SA
COC: 128247

Work Order: S1001169
Collection Date: 1/14/2010 11:15:00 AM
Date Received: 1/14/2010 4:02:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.47	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Carbonate as CO ₃	2.90	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Chloride	0.33	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Sulfate	2.74	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Calcium	0.92	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Magnesium	0.86	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Potassium	0.43	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Sodium	9.19	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	11.41	0		meq/L	01/20/2010 1105 KO	SM 1030E
Anion Sum	12.47	0		meq/L	01/20/2010 1105 KO	SM 1030E
Cation-Anion Balance	4.40	0		%	01/20/2010 1105 KO	SM 1030E
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	01/14/2010 2033 DG	EPA 200.7
Arsenic	0.005	0.005		mg/L	01/15/2010 1328 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/15/2010 1328 MS	EPA 200.8
Boron	0.1	0.1		mg/L	01/14/2010 2033 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/15/2010 1328 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/14/2010 2033 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/15/2010 1328 MS	EPA 200.8
Iron	0.07	0.05		mg/L	01/14/2010 2033 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/15/2010 1328 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/19/2010 1115 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/15/2010 1328 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/14/2010 2033 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/15/2010 1328 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	01/15/2010 1328 MS	EPA 200.8
Vanadium	0.02	0.02		mg/L	01/15/2010 1328 MS	EPA 200.8
Zinc	0.04	0.01		mg/L	01/14/2010 2033 DG	EPA 200.7
Total Metals						
Iron	27.6	0.05		mg/L	01/15/2010 1520 DG	EPA 200.7
Manganese	0.63	0.02		mg/L	01/15/2010 1520 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 2/1/2010
Report ID: S1001169001

Project: ROSS ISR
Lab ID: S1001169-002
Client Sample ID: 34-18 SM
COC: 128247

Work Order: S1001169
Collection Date: 1/14/2010 12:45:00 PM
Date Received: 1/14/2010 4:02:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.64			s.u.	01/14/2010 1245	Field
Conductivity	1325			µmhos/cm	01/14/2010 1245	Field
Turbidity	114			NTU	01/14/2010 1245	Field
Temperature	10.6			°C	01/14/2010 1245	Field
General Parameters						
pH	10.0	0.1		s.u.	01/15/2010 1416 KO	SM 4500 H B
Electrical Conductivity	1280	5		µmhos/cm	01/15/2010 1416 KO	SM 2510B
Total Dissolved Solids (180)	850	10		mg/L	01/15/2010 1150 AMB	SM 2540
Solids, Total Dissolved (Calc)	790	10		mg/L	01/20/2010 1105 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	438	5		mg/L	01/15/2010 1416 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	01/26/2010 1415 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	01/29/2010 1543 SH	SM 7110B
Gross Beta	22.6 ± 3.0	3		pCi/L	01/29/2010 1543 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	01/27/2010 1623 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/28/2010 2335 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	197	5		mg/L	01/15/2010 1416 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	166	5		mg/L	01/15/2010 1416 KO	SM 2320B
Chloride	8	1		mg/L	01/15/2010 1731 KO	EPA 300.0
Fluoride	1.8	0.1		mg/L	01/15/2010 1416 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/26/2010 1715 SK	EPA 353.2
Sulfate	211	1		mg/L	01/15/2010 1731 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	01/14/2010 2036 DG	EPA 200.7
Magnesium	ND	1		mg/L	01/14/2010 2036 DG	EPA 200.7
Potassium	35	1		mg/L	01/14/2010 2036 DG	EPA 200.7
Sodium	271	1		mg/L	01/14/2010 2036 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 2/1/2010
Report ID: S1001169001

Project: ROSS ISR
Lab ID: S1001169-002
Client Sample ID: 34-18 SM
COC: 128247

Work Order: S1001169
Collection Date: 1/14/2010 12:45:00 PM
Date Received: 1/14/2010 4:02:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	3.23	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Carbonate as CO ₃	5.52	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Chloride	0.21	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Fluoride	0.09	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Sulfate	4.39	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Calcium	0.20	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Magnesium	ND	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Potassium	0.89	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Sodium	11.78	0.01		meq/L	01/20/2010 1105 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.88	0		meq/L	01/20/2010 1105 KO	SM 1030E
Anion Sum	13.46	0		meq/L	01/20/2010 1105 KO	SM 1030E
Cation-Anion Balance	2.21	0		%	01/20/2010 1105 KO	SM 1030E
Dissolved Metals						
Aluminum	0.4	0.1		mg/L	01/14/2010 2036 DG	EPA 200.7
Arsenic	0.018	0.005		mg/L	01/15/2010 1338 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/15/2010 1338 MS	EPA 200.8
Boron	0.2	0.1		mg/L	01/14/2010 2036 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/15/2010 1338 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/14/2010 2036 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/15/2010 1338 MS	EPA 200.8
Iron	0.23	0.05		mg/L	01/14/2010 2036 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/15/2010 1338 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/19/2010 1117 DJ	EPA 245.1
Molybdenum	0.04	0.02		mg/L	01/15/2010 1338 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/14/2010 2036 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/15/2010 1338 MS	EPA 200.8
Uranium	ND	0.001		mg/L	01/15/2010 1338 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/15/2010 1338 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/14/2010 2036 DG	EPA 200.7
Total Metals						
Iron	2.66	0.05		mg/L	01/15/2010 1523 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	01/15/2010 1523 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/21/2009
Report ID: S0912102001

Project: Ross ISR
Lab ID: S0912102-001
Client Sample ID: 34-7DM
COC: 131117

Work Order: S0912102
Collection Date: 12/5/2009 3:30:00 PM
Date Received: 12/7/2009 8:05:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	8.9	0.1		s.u.	12/09/2009 1508 CK	SM 4500 H B
Electrical Conductivity	1070	5		µmhos/cm	12/09/2009 1508 CK	SM 2510B
Total Dissolved Solids (180)	750	10		mg/L	12/09/2009 1155 AMB	SM 2540
Solids, Total Dissolved (Calc)	650	10		mg/L	12/11/2009 856 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	445	5		mg/L	12/09/2009 1508 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	12/15/2009 1358 SK	EPA 350.1
Gross Alpha	5.8 ± 2.1	2		pCi/L	12/18/2009 1448 SH	SM 7110B
Gross Beta	18.0 ± 2.9	3		pCi/L	12/18/2009 1448 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	12/16/2009 1527 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	12/18/2009 050 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	459	5		mg/L	12/09/2009 1508 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	41	5		mg/L	12/09/2009 1508 CK	SM 2320B
Chloride	25	1		mg/L	12/09/2009 2303 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	12/09/2009 1508 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	12/15/2009 1420 SK	EPA 353.2
Sulfate	104	1		mg/L	12/09/2009 2303 KO	EPA 300.0
Cations						
Calcium	23	1		mg/L	12/08/2009 2314 DG	EPA 200.7
Magnesium	20	1		mg/L	12/08/2009 2314 DG	EPA 200.7
Potassium	20	1		mg/L	12/08/2009 2314 DG	EPA 200.7
Sodium	188	1		mg/L	12/08/2009 2314 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.51	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Carbonate as CO ₃	1.37	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Chloride	0.70	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Sulfate	2.17	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Calcium	1.16	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Magnesium	1.62	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Potassium	0.50	0.01		meq/L	12/11/2009 856 KO	SM 1030E
Sodium	8.19	0.01		meq/L	12/11/2009 856 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/21/2009
Report ID: S0912102001

Project: Ross ISR
Lab ID: S0912102-001
Client Sample ID: 34-7DM
COC: 131117

Work Order: S0912102
Collection Date: 12/5/2009 3:30:00 PM
Date Received: 12/7/2009 8:05:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	11.49	0		meq/L	12/11/2009 856 KO	SM 1030E
Anion Sum	11.78	0		meq/L	12/11/2009 856 KO	SM 1030E
Cation-Anion Balance	1.26	0		%	12/11/2009 856 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	12/08/2009 2314 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	12/09/2009 1200 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/09/2009 1200 MS	EPA 200.8
Boron	0.2	0.1		mg/L	12/08/2009 2314 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/09/2009 1200 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/08/2009 2314 DG	EPA 200.7
Copper	ND	0.01		mg/L	12/09/2009 1200 MS	EPA 200.8
Iron	ND	0.05		mg/L	12/08/2009 2314 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/09/2009 1200 MS	EPA 200.8
Mercury	ND	0.001		mg/L	12/14/2009 1341 BK	EPA 245.1
Molybdenum	0.03	0.02		mg/L	12/09/2009 1200 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/08/2009 2314 DG	EPA 200.7
Selenium	ND	0.005		mg/L	12/09/2009 1200 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	12/09/2009 1200 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	12/09/2009 1200 MS	EPA 200.8
Zinc	ND	0.01		mg/L	12/08/2009 2314 DG	EPA 200.7
Total Metals						
Iron	17.5	0.05		mg/L	12/09/2009 2324 DG	EPA 200.7
Manganese	0.30	0.02		mg/L	12/09/2009 2324 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002002001

Project: ROSS ISR
Lab ID: S1002002-002
Client Sample ID: 34-70Z
COC: 131155

Work Order: S1002002
Collection Date: 1/30/2010 1:40:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.13			s.u.	01/30/2010 1340	Field
Conductivity	3050			µmhos/cm	01/30/2010 1340	Field
Turbidity	24.5			NTU	01/30/2010 1340	Field
Temperature	9.6			°C	01/30/2010 1340	Field
General Parameters						
pH	8.9	0.1		s.u.	02/01/2010 1836 KO	SM 4500 H B
Electrical Conductivity	2240	5		µmhos/cm	02/01/2010 1836 KO	SM 2510B
Total Dissolved Solids (180)	1600	10		mg/L	02/01/2010 1350 AMB	SM 2540
Solids, Total Dissolved (Calc)	1530	10		mg/L	02/04/2010 759 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	560	5		mg/L	02/01/2010 1836 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	02/03/2010 1714 SK	EPA 350.1
Gross Alpha	79.4 ± 6.7	2		pCi/L	02/09/2010 1148 SH	SM 7110B
Gross Beta	18.1 ± 4.0	4.10		pCi/L	02/09/2010 1148 SH	SM 7110B
Radium 226	1.83 ± 0.18	0.2		pCi/L	02/16/2010 1628 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/18/2010 023 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	590	5		mg/L	02/01/2010 1836 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	46	5		mg/L	02/01/2010 1836 KO	SM 2320B
Chloride	4	1		mg/L	02/01/2010 1920 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	02/01/2010 1836 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	02/10/2010 1508 SK	EPA 353.2
Sulfate	622	1		mg/L	02/01/2010 1920 KO	EPA 300.0
Cations						
Calcium	8	1		mg/L	02/01/2010 2245 DG	EPA 200.7
Magnesium	2	1		mg/L	02/01/2010 2245 DG	EPA 200.7
Potassium	8	1		mg/L	02/01/2010 2245 DG	EPA 200.7
Sodium	552	1		mg/L	02/01/2010 2245 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002002001

Project: ROSS ISR
Lab ID: S1002002-002
Client Sample ID: 34-70Z
COC: 131155

Work Order: S1002002
Collection Date: 1/30/2010 1:40:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.67	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Carbonate as CO ₃	1.51	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Chloride	0.12	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Sulfate	12.94	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Calcium	0.38	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Magnesium	0.18	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Potassium	0.20	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Sodium	23.99	0.01		meq/L	02/04/2010 759 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.76	0		meq/L	02/04/2010 759 KO	SM 1030E
Anion Sum	24.28	0		meq/L	02/04/2010 759 KO	SM 1030E
Cation-Anion Balance	0.97	0		%	02/04/2010 759 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	02/01/2010 2245 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	02/01/2010 1335 MS	EPA 200.8
Barium	ND	0.5		mg/L	02/01/2010 1335 MS	EPA 200.8
Boron	0.4	0.1		mg/L	02/01/2010 2245 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	02/01/2010 1335 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/01/2010 2245 DG	EPA 200.7
Copper	ND	0.01		mg/L	02/01/2010 1335 MS	EPA 200.8
Iron	0.05	0.05		mg/L	02/01/2010 2245 DG	EPA 200.7
Lead	ND	0.02		mg/L	02/01/2010 1335 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 1302 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	02/01/2010 1335 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/01/2010 2245 DG	EPA 200.7
Selenium	ND	0.005		mg/L	02/01/2010 1335 MS	EPA 200.8
Uranium	0.045	0.001		mg/L	02/01/2010 1335 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	02/01/2010 1335 MS	EPA 200.8
Zinc	ND	0.01		mg/L	02/01/2010 2245 DG	EPA 200.7
Total Metals						
Iron	0.79	0.05		mg/L	02/02/2010 2338 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	02/02/2010 2338 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/5/2010
Report ID: S0912182001

Project: ROSS ISR 0914235
Lab ID: S0912182-001
Client Sample ID: 34-7 SA
COC: 131119

Work Order: S0912182
Collection Date: 12/12/2009 1:45:00 PM
Date Received: 12/14/2009 8:15:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	10.1	0.1		s.u.	12/15/2009 1336 CK	SM 4500 H B
Electrical Conductivity	899	5		µmhos/cm	12/15/2009 1336 CK	SM 2510B
Total Dissolved Solids (180)	570	10		mg/L	12/15/2009 1430 KO	SM 2540
Solids, Total Dissolved (Calc)	520	10		mg/L	12/21/2009 749 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	321	5		mg/L	12/15/2009 1336 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	12/15/2009 1456 SK	EPA 350.1
Gross Alpha	3.0 ± 1.7	2		pCi/L	01/04/2010 1555 SH	SM 7110B
Gross Beta	8.6 ± 2.6	3		pCi/L	01/04/2010 1555 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	12/24/2009 2149 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	12/29/2009 124 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	106	5		mg/L	12/15/2009 1336 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	140	5		mg/L	12/15/2009 1336 CK	SM 2320B
Chloride	11	1		mg/L	12/16/2009 119 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	12/15/2009 1336 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	12/15/2009 1534 SK	EPA 353.2
Sulfate	114	1		mg/L	12/16/2009 119 KO	EPA 300.0
Cations						
Calcium	8	1		mg/L	12/15/2009 2034 DG	EPA 200.7
Magnesium	4	1		mg/L	12/15/2009 2034 DG	EPA 200.7
Potassium	13	1		mg/L	12/15/2009 2034 DG	EPA 200.7
Sodium	178	1		mg/L	12/15/2009 2034 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	1.74	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Carbonate as CO ₃	4.67	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Chloride	0.29	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Sulfate	2.36	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Calcium	0.41	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Magnesium	0.30	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Potassium	0.33	0.01		meq/L	12/21/2009 749 KO	SM 1030E
Sodium	7.74	0.01		meq/L	12/21/2009 749 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/5/2010
Report ID: S0912182001

Project: ROSS ISR 0914235
Lab ID: S0912182-001
Client Sample ID: 34-7 SA
COC: 131119

Work Order: S0912182
Collection Date: 12/12/2009 1:45:00 PM
Date Received: 12/14/2009 8:15:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	8.80	0		meq/L	12/21/2009 749 KO	SM 1030E
Anion Sum	9.10	0		meq/L	12/21/2009 749 KO	SM 1030E
Cation-Anion Balance	1.68	0		%	12/21/2009 749 KO	SM 1030E
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	12/15/2009 2034 DG	EPA 200.7
Arsenic	0.008	0.005		mg/L	12/16/2009 1514 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/16/2009 1514 MS	EPA 200.8
Boron	0.1	0.1		mg/L	12/15/2009 2034 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/16/2009 1514 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/15/2009 2034 DG	EPA 200.7
Copper	ND	0.01		mg/L	12/16/2009 1514 MS	EPA 200.8
Iron	0.15	0.05		mg/L	12/15/2009 2034 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/16/2009 1514 MS	EPA 200.8
Mercury	ND	0.001		mg/L	12/17/2009 920 BK	EPA 245.1
Molybdenum	0.06	0.02		mg/L	12/16/2009 1514 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/15/2009 2034 DG	EPA 200.7
Selenium	0.006	0.005		mg/L	12/16/2009 1514 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	12/16/2009 1514 MS	EPA 200.8
Vanadium	0.04	0.02		mg/L	12/16/2009 1514 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	12/15/2009 2034 DG	EPA 200.7
Total Metals						
Iron	0.94	0.05		mg/L	12/16/2009 1632 DG	EPA 200.7
Manganese	ND	0.02		mg/L	12/16/2009 1632 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/5/2010
Report ID: S0912183001

Project: ROSS ISP 09142
Lab ID: S0912183-001
Client Sample ID: 34-7 SM
COC: 131118

Work Order: S0912183
Collection Date: 12/11/2009 4:00:00 PM
Date Received: 12/14/2009 8:15:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	10.2	0.1		s.u.	12/15/2009 1326 CK	SM 4500 H B
Electrical Conductivity	1580	5		µmhos/cm	12/15/2009 1326 CK	SM 2510B
Total Dissolved Solids (180)	1000	10		mg/L	12/15/2009 1435 KO	SM 2540
Solids, Total Dissolved (Calc)	950	10		mg/L	12/21/2009 750 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	596	5		mg/L	12/15/2009 1326 CK	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	12/15/2009 1457 SK	EPA 350.1
Gross Alpha	14.9 ± 3.2	2		pCi/L	01/05/2010 437 SH	SM 7110B
Gross Beta	19.5 ± 4.1	5.9		pCi/L	01/05/2010 437 SH	SM 7110B
Radium 226	0.24 ± 0.10	0.2		pCi/L	12/24/2009 2149 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	12/29/2009 124 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	198	5		mg/L	12/15/2009 1326 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	260	5		mg/L	12/15/2009 1326 CK	SM 2320B
Chloride	5	1		mg/L	12/16/2009 131 KO	EPA 300.0
Fluoride	1.3	0.1		mg/L	12/15/2009 1326 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	12/15/2009 1535 SK	EPA 353.2
Sulfate	204	1		mg/L	12/16/2009 131 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	12/15/2009 2036 DG	EPA 200.7
Magnesium	1	1		mg/L	12/15/2009 2036 DG	EPA 200.7
Potassium	36	1		mg/L	12/15/2009 2036 DG	EPA 200.7
Sodium	337	1		mg/L	12/15/2009 2036 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	3.25	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Carbonate as CO ₃	8.67	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Chloride	0.13	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Sulfate	4.24	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Calcium	0.28	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Magnesium	0.08	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Potassium	0.90	0.01		meq/L	12/21/2009 750 KO	SM 1030E
Sodium	14.66	0.01		meq/L	12/21/2009 750 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/5/2010
Report ID: S0912183001

Project: ROSS ISP 09142
Lab ID: S0912183-001
Client Sample ID: 34-7 SM
COC: 131118

Work Order: S0912183
Collection Date: 12/11/2009 4:00:00 PM
Date Received: 12/14/2009 8:15:00 AM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	15.95	0		meq/L	12/21/2009 750 KO	SM 1030E
Anion Sum	16.37	0		meq/L	12/21/2009 750 KO	SM 1030E
Cation-Anion Balance	1.30	0		%	12/21/2009 750 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	12/15/2009 2036 DG	EPA 200.7
Arsenic	0.036	0.005		mg/L	12/16/2009 1518 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/16/2009 1518 MS	EPA 200.8
Boron	0.1	0.1		mg/L	12/15/2009 2036 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/16/2009 1518 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/15/2009 2036 DG	EPA 200.7
Copper	ND	0.01		mg/L	12/16/2009 1518 MS	EPA 200.8
Iron	ND	0.05		mg/L	12/15/2009 2036 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/16/2009 1518 MS	EPA 200.8
Mercury	ND	0.001		mg/L	12/17/2009 922 BK	EPA 245.1
Molybdenum	0.05	0.02		mg/L	12/16/2009 1518 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/15/2009 2036 DG	EPA 200.7
Selenium	ND	0.005		mg/L	12/16/2009 1518 MS	EPA 200.8
Uranium	0.004	0.001		mg/L	12/16/2009 1518 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	12/16/2009 1518 MS	EPA 200.8
Zinc	ND	0.01		mg/L	12/15/2009 2036 DG	EPA 200.7
Total Metals						
Iron	0.37	0.05		mg/L	12/16/2009 1634 DG	EPA 200.7
Manganese	ND	0.02		mg/L	12/16/2009 1634 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/19/2010
Report ID: S0912405001

Project: ROSS ISR
Lab ID: S0912405-001
Client Sample ID: 42-19DM
COC: 131126

Work Order: S0912405
Collection Date: 12/30/2009 5:30:00 PM
Date Received: 12/31/2009 9:06:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.82			s.u.	12/30/2009 1730	Field
Conductivity	1012			µmhos/cm	12/30/2009 1730	Field
Turbidity	472			NTU	12/30/2009 1730	Field
General Parameters						
pH	9.2	0.1		s.u.	12/31/2009 1508 KO	SM 4500 H B
Electrical Conductivity	997	5		µmhos/cm	12/31/2009 1508 KO	SM 2510B
Total Dissolved Solids (180)	690	10		mg/L	01/04/2010 1220 AMB	SM 2540
Solids, Total Dissolved (Calc)	690	10		mg/L	01/06/2010 852 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	523	5		mg/L	12/31/2009 1508 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	01/07/2010 1516 SK	EPA 350.1
Gross Alpha	19.0 ± 3.6	2		pCi/L	01/19/2010 610 SH	SM 7110B
Gross Beta	39.7 ± 4.5	4.10		pCi/L	01/19/2010 610 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	01/08/2010 1554 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	01/13/2010 114 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	486	5		mg/L	12/31/2009 1508 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	75	5		mg/L	12/31/2009 1508 KO	SM 2320B
Chloride	9	1		mg/L	12/31/2009 1944 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	12/31/2009 1508 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/07/2010 1443 SK	EPA 353.2
Sulfate	94	1		mg/L	12/31/2009 1944 KO	EPA 300.0
Cations						
Calcium	12	1		mg/L	12/31/2009 1301 DG	EPA 200.7
Magnesium	16	1		mg/L	12/31/2009 1301 DG	EPA 200.7
Potassium	22	1		mg/L	12/31/2009 1301 DG	EPA 200.7
Sodium	219	1		mg/L	12/31/2009 1301 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/19/2010
Report ID: S0912405001

Project: ROSS ISR
Lab ID: S0912405-001
Client Sample ID: 42-19DM
COC: 131126

Work Order: S0912405
Collection Date: 12/30/2009 5:30:00 PM
Date Received: 12/31/2009 9:06:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.96	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Carbonate as CO ₃	2.49	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Chloride	0.26	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Sulfate	1.95	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Calcium	0.59	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Magnesium	1.30	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Potassium	0.57	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Sodium	9.53	0.01		meq/L	01/06/2010 852 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.00	0		meq/L	01/06/2010 852 KO	SM 1030E
Anion Sum	12.68	0		meq/L	01/06/2010 852 KO	SM 1030E
Cation-Anion Balance	2.78	0		%	01/06/2010 852 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	12/31/2009 1301 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/04/2010 1232 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/04/2010 1232 MS	EPA 200.8
Boron	ND	0.1		mg/L	12/31/2009 1301 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/04/2010 1232 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/31/2009 1301 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/04/2010 1232 MS	EPA 200.8
Iron	ND	0.05		mg/L	12/31/2009 1301 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/04/2010 1232 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/05/2010 1136 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/04/2010 1232 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/31/2009 1301 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/04/2010 1232 MS	EPA 200.8
Uranium	0.006	0.001		mg/L	01/04/2010 1232 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/04/2010 1232 MS	EPA 200.8
Zinc	ND	0.01		mg/L	12/31/2009 1301 DG	EPA 200.7
Total Metals						
Iron	14.0	0.05		mg/L	01/04/2010 2333 DG	EPA 200.7
Manganese	0.28	0.02		mg/L	01/04/2010 2333 DG	EPA 200.7

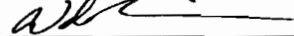
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912370001

Project: ROSS ISR
Lab ID: S0912370-001
Client Sample ID: 42-19 OZ
COC: 131125

Work Order: S0912370
Collection Date: 12/22/2009 10:30:00 AM
Date Received: 12/23/2009 4:50:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.99			s.u.	12/22/2009 1030	Field
Conductivity	1918			µmhos/cm	12/22/2009 1030	Field
Turbidity	669			NTU	12/22/2009 1030	Field
Temperature	20.8			°C	12/22/2009 1030	Field
General Parameters						
pH	9.6	0.1		s.u.	12/30/2009 1051 CK	SM 4500 H B
Electrical Conductivity	1810	5		µmhos/cm	12/30/2009 1051 CK	SM 2510B
Total Dissolved Solids (180)	1360	10		mg/L	12/29/2009 1150 AMB	SM 2540
Solids, Total Dissolved (Calc)	1270	10		mg/L	01/04/2010 955 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	476	5		mg/L	12/30/2009 1051 CK	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	12/30/2009 1929 SK	EPA 350.1
Gross Alpha	48.9 ± 5.4	2		pCi/L	01/13/2010 000 SH	SM 7110B
Gross Beta	30.1 ± 4.2	3.95		pCi/L	01/13/2010 000 SH	SM 7110B
Radium 226	0.74 ± 0.22	0.22		pCi/L	01/08/2010 1554 SH	SM 7500-Ra B
Total Radium 228	2.0 ± 1.3	1.1		pCi/L	01/13/2010 114 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	342	5		mg/L	12/30/2009 1051 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	118	5		mg/L	12/30/2009 1051 CK	SM 2320B
Chloride	5	1		mg/L	12/30/2009 1858 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	12/30/2009 1051 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.4	0.1		mg/L	01/07/2010 1441 SK	EPA 353.2
Sulfate	497	1		mg/L	12/30/2009 1858 KO	EPA 300.0
Cations						
Calcium	5	1		mg/L	12/29/2009 1500 DG	EPA 200.7
Magnesium	1	1		mg/L	12/29/2009 1500 DG	EPA 200.7
Potassium	9	1		mg/L	12/29/2009 1500 DG	EPA 200.7
Sodium	472	1		mg/L	12/29/2009 1500 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/14/2010
Report ID: S0912370001

Project: ROSS ISR
Lab ID: S0912370-001
Client Sample ID: 42-19 OZ
COC: 131125

Work Order: S0912370
Collection Date: 12/22/2009 10:30:00 AM
Date Received: 12/23/2009 4:50:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.60	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Carbonate as CO ₃	3.92	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Chloride	0.14	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Sulfate	10.34	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Calcium	0.24	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Magnesium	0.08	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Potassium	0.23	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Sodium	20.52	0.01		meq/L	01/04/2010 955 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.08	0		meq/L	01/04/2010 955 KO	SM 1030E
Anion Sum	20.04	0		meq/L	01/04/2010 955 KO	SM 1030E
Cation-Anion Balance	2.53	0		%	01/04/2010 955 KO	SM 1030E
Dissolved Metals						
Aluminum	0.3	0.1		mg/L	12/29/2009 1500 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	12/29/2009 1216 MS	EPA 200.8
Barium	ND	0.5		mg/L	12/29/2009 1216 MS	EPA 200.8
Boron	0.2	0.1		mg/L	12/29/2009 1500 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	12/29/2009 1216 MS	EPA 200.8
Chromium	ND	0.01		mg/L	12/29/2009 1500 DG	EPA 200.7
Copper	ND	0.01		mg/L	12/29/2009 1216 MS	EPA 200.8
Iron	0.19	0.05		mg/L	12/29/2009 1500 DG	EPA 200.7
Lead	ND	0.02		mg/L	12/29/2009 1216 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/05/2010 1034 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	12/29/2009 1216 MS	EPA 200.8
Nickel	ND	0.01		mg/L	12/29/2009 1500 DG	EPA 200.7
Selenium	ND	0.005		mg/L	12/29/2009 1216 MS	EPA 200.8
Uranium	0.015	0.001		mg/L	12/29/2009 1216 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	12/29/2009 1216 MS	EPA 200.8
Zinc	ND	0.01		mg/L	12/29/2009 1500 DG	EPA 200.7
Total Metals						
Iron	7.60	0.05		mg/L	12/30/2009 1440 DG	EPA 200.7
Manganese	0.14	0.02		mg/L	12/30/2009 1440 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 2/4/2010
Report ID: S1001120001

Project: Ross ISR
Lab ID: S1001120-001
Client Sample ID: 42-19SA
COC: 107702

Work Order: S1001120
Collection Date: 1/9/2010 1:15:00 PM
Date Received: 1/11/2010 8:00:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.11			s.u.	01/09/2010 1315	Field
Conductivity	1410			µmhos/cm	01/09/2010 1315	Field
Dissolved Oxygen	10.6			mg/L	01/09/2010 1315	Field
Turbidity	630			NTU	01/09/2010 1315	Field
Temperature	15.1			°C	01/09/2010 1315	Field
General Parameters						
pH	9.6	0.1		s.u.	01/13/2010 1412 KO	SM 4500 H B
Electrical Conductivity	1350	5		µmhos/cm	01/13/2010 1412 KO	SM 2510B
Total Dissolved Solids (180)	940	10		mg/L	01/13/2010 1305 AMB	SM 2540
Solids, Total Dissolved (Calc)	870	10		mg/L	01/18/2010 1055 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	605	5		mg/L	01/13/2010 1412 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	01/13/2010 1112 KO	EPA 350.1
Gross Alpha	17.7 ± 3.6	2		pCi/L	01/18/2010 1748 SH	SM 7110B
Gross Beta	18.9 ± 2.9	3		pCi/L	01/18/2010 1748 SH	SM 7110B
Radium 226	0.74 ± 0.23	0.32		pCi/L	01/27/2010 1318 SH	SM 7500-Ra B
Total Radium 228	ND	2		pCi/L	01/28/2010 2335 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	472	5		mg/L	01/13/2010 1412 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	131	5		mg/L	01/13/2010 1412 KO	SM 2320B
Chloride	10	1		mg/L	01/14/2010 1622 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	01/13/2010 1412 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/26/2010 1658 SK	EPA 353.2
Sulfate	127	1		mg/L	01/14/2010 1622 KO	EPA 300.0
Cations						
Calcium	8	1		mg/L	01/12/2010 1838 DG	EPA 200.7
Magnesium	4	1		mg/L	01/12/2010 1838 DG	EPA 200.7
Potassium	28	1		mg/L	01/12/2010 1838 DG	EPA 200.7
Sodium	325	1		mg/L	01/12/2010 1838 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 2/4/2010
Report ID: S1001120001

Project: Ross ISR
Lab ID: S1001120-001
Client Sample ID: 42-19SA
COC: 107702

Work Order: S1001120
Collection Date: 1/9/2010 1:15:00 PM
Date Received: 1/11/2010 8:00:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.74	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Carbonate as CO ₃	4.35	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Chloride	0.28	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Sulfate	2.64	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Calcium	0.38	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Magnesium	0.36	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Potassium	0.71	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Sodium	14.14	0.01		meq/L	01/18/2010 1055 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.59	0		meq/L	01/18/2010 1055 KO	SM 1030E
Anion Sum	15.06	0		meq/L	01/18/2010 1055 KO	SM 1030E
Cation-Anion Balance	1.74	0		%	01/18/2010 1055 KO	SM 1030E
Dissolved Metals						
Aluminum	9.4	0.1		mg/L	01/12/2010 1838 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	01/13/2010 1231 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/13/2010 1231 MS	EPA 200.8
Boron	0.3	0.1		mg/L	01/12/2010 1838 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/13/2010 1231 MS	EPA 200.8
Chromium	0.01	0.01		mg/L	01/12/2010 1838 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/13/2010 1231 MS	EPA 200.8
Iron	4.67	0.05		mg/L	01/12/2010 1838 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/13/2010 1231 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/13/2010 1413 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/13/2010 1231 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/12/2010 1838 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/13/2010 1231 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	01/13/2010 1231 MS	EPA 200.8
Vanadium	0.03	0.02		mg/L	01/13/2010 1231 MS	EPA 200.8
Zinc	0.15	0.01		mg/L	01/12/2010 1838 DG	EPA 200.7
Total Metals						
Iron	5.04	0.05		mg/L	01/13/2010 2211 DG	EPA 200.7
Manganese	0.07	0.02		mg/L	01/13/2010 2211 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/18/2010
Report ID: S1001063001

Project: ROSS ISR
Lab ID: S1001063-001
Client Sample ID: 42-19SM
COC: 131127

Work Order: S1001063
Collection Date: 1/5/2010 5:00:00 PM
Date Received: 1/7/2010 8:00:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.53			s.u.	01/05/2010 1700	Field
Conductivity	1308			µmhos/cm	01/05/2010 1700	Field
Turbidity	882			NTU	01/05/2010 1700	Field
Temperature	15.3			°C	01/05/2010 1700	Field
General Parameters						
pH	10.2	0.1		s.u.	01/08/2010 1848 SK	SM 4500 H B
Electrical Conductivity	1290	5		µmhos/cm	01/08/2010 1848 SK	SM 2510B
Total Dissolved Solids (180)	890	10		mg/L	01/08/2010 1230 AMB	SM 2540
Solids, Total Dissolved (Calc)	810	10		mg/L	01/13/2010 1205 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	585	5		mg/L	01/08/2010 1848 SK	SM 2320B
Nitrogen, Ammonia (As N)	0.9	0.1		mg/L	01/07/2010 1603 SK	EPA 350.1
Gross Alpha	16.7 ± 3.9	2.39		pCi/L	01/13/2010 000 SH	SM 7110B
Gross Beta	22.4 ± 3.0	3		pCi/L	01/13/2010 000 SH	SM 7110B
Radium 226	0.91 ± 0.61	0.2		pCi/L	01/14/2010 1426 SH	SM 7500-Ra B
Total Radium 228	ND	5.8		pCi/L	01/14/2010 000 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	249	5		mg/L	01/08/2010 1848 SK	SM 2320B
Alkalinity, Carbonate as CO ₃	228	5		mg/L	01/08/2010 1848 SK	SM 2320B
Chloride	11	1		mg/L	01/12/2010 1028 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	01/08/2010 1848 SK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/07/2010 1542 SK	EPA 353.2
Sulfate	110	1		mg/L	01/12/2010 1028 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	01/07/2010 2010 DG	EPA 200.7
Magnesium	1	1		mg/L	01/07/2010 2010 DG	EPA 200.7
Potassium	17	1		mg/L	01/07/2010 2010 DG	EPA 200.7
Sodium	313	1		mg/L	01/07/2010 2010 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

Page 1 of 2



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 1/18/2010
Report ID: S1001063001

Project: ROSS ISR
Lab ID: S1001063-001
Client Sample ID: 42-19SM
COC: 131127

Work Order: S1001063
Collection Date: 1/5/2010 5:00:00 PM
Date Received: 1/7/2010 8:00:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	4.08	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Carbonate as CO ₃	7.61	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Chloride	0.31	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Sulfate	2.29	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Calcium	0.14	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Magnesium	0.08	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Potassium	0.43	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Sodium	13.62	0.01		meq/L	01/13/2010 1205 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	14.28	0		meq/L	01/13/2010 1205 KO	SM 1030E
Anion Sum	14.36	0		meq/L	01/13/2010 1205 KO	SM 1030E
Cation-Anion Balance	0.26	0		%	01/13/2010 1205 KO	SM 1030E
Dissolved Metals						
Aluminum	0.7	0.1		mg/L	01/07/2010 2010 DG	EPA 200.7
Arsenic	0.013	0.005		mg/L	01/11/2010 1050 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/11/2010 1050 MS	EPA 200.8
Boron	0.1	0.1		mg/L	01/07/2010 2010 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/11/2010 1050 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/07/2010 2010 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/11/2010 1050 MS	EPA 200.8
Iron	0.34	0.05		mg/L	01/07/2010 2010 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/11/2010 1050 MS	EPA 200.8
Mercury	ND	0.001		mg/L	01/08/2010 1132 BK	EPA 245.1
Molybdenum	0.09	0.02		mg/L	01/11/2010 1050 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/07/2010 2010 DG	EPA 200.7
Selenium	0.009	0.005		mg/L	01/11/2010 1050 MS	EPA 200.8
Uranium	0.002	0.001		mg/L	01/11/2010 1050 MS	EPA 200.8
Vanadium	0.06	0.02		mg/L	01/11/2010 1050 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	01/07/2010 2010 DG	EPA 200.7
Total Metals						
Iron	19.2	0.05		mg/L	01/08/2010 1538 DG	EPA 200.7
Manganese	0.36	0.02		mg/L	01/08/2010 1538 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

Page 2 of 2



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003168002
(Replaces S1003168001)

Project: Ross ISR
Lab ID: S1003168-002
Client Sample ID: 12-18 DM
COC: 131163

Work Order: S1003168
Collection Date: 3/10/2010 3:00:00 PM
Date Received: 3/10/2010 4:22:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.64			s.u.	03/10/2010 1500	Field
Conductivity	3400			µmhos/cm	03/10/2010 1500	Field
Dissolved Oxygen (pct)	48.5			%	03/10/2010 1500	Field
Turbidity	21.7			NTU	03/10/2010 1500	Field
Temperature	10.5			°C	03/10/2010 1500	Field
General Parameters						
pH	11.5	0.1		s.u.	03/11/2010 1848 KO	SM 4500 H B
Electrical Conductivity	2400	5		µmhos/cm	03/11/2010 1848 KO	SM 2510B
Total Dissolved Solids (180)	1140	10		mg/L	03/12/2010 1230 AMB	SM 2540
Solids, Total Dissolved (Calc)	1160	10		mg/L	03/16/2010 732 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	466	5		mg/L	03/11/2010 1848 KO	SM 2320B
Nitrogen, Ammonia (As N)	2.4	0.1		mg/L	03/11/2010 1742 SK	EPA 350.1
Gross Alpha	4.7 ± 2.5	2		pCi/L	03/21/2010 1101 SH	SM 7110B
Gross Beta	24.1 ± 4.0	3.9		pCi/L	03/21/2010 1101 SH	SM 7110B
Radon-222	242±37	30	L	pCi/L	03/12/2010 744 GD	SM7500-RN
Radium 226	0.28 ± 0.09	0.2		pCi/L	03/19/2010 1603 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/23/2010 153 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	03/11/2010 1848 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	171	5		mg/L	03/11/2010 1848 KO	SM 2320B
Chloride	376	1		mg/L	03/12/2010 040 KO	EPA 300.0
Fluoride	1.0	0.1		mg/L	03/11/2010 1848 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/17/2010 1328 SK	EPA 353.2
Sulfate	30	1		mg/L	03/12/2010 040 KO	EPA 300.0
Cations						
Calcium	8	1		mg/L	03/11/2010 2015 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/11/2010 2015 DG	EPA 200.7
Potassium	39	1		mg/L	03/11/2010 2015 DG	EPA 200.7
Sodium	427	1		mg/L	03/11/2010 2015 DG	EPA 200.7

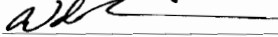
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010

Report ID: S1003168002
(Replaces S1003168001)

Project: Ross ISR
Lab ID: S1003168-002
Client Sample ID: 12-18 DM
COC: 131163

Work Order: S1003168
Collection Date: 3/10/2010 3:00:00 PM
Date Received: 3/10/2010 4:22:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Carbonate as CO ₃	5.69	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Chloride	10.61	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Sulfate	0.63	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Calcium	0.42	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Potassium	0.99	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Sodium	18.55	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.97	0		meq/L	03/16/2010 732 KO	SM 1030E
Anion Sum	20.60	0		meq/L	03/16/2010 732 KO	SM 1030E
Cation-Anion Balance	1.54	0		%	03/16/2010 732 KO	SM 1030E
Dissolved Metals						
Aluminum	0.6	0.1		mg/L	03/11/2010 2015 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	03/11/2010 1652 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/11/2010 1652 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/11/2010 2015 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/11/2010 1652 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/11/2010 2015 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/11/2010 1652 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/11/2010 2015 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/11/2010 1652 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/16/2010 1107 BK	EPA 245.1
Molybdenum	0.06	0.02		mg/L	03/11/2010 1652 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/11/2010 2015 DG	EPA 200.7
Selenium	0.012	0.005		mg/L	03/11/2010 1652 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/11/2010 1652 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/11/2010 1652 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/11/2010 2015 DG	EPA 200.7
Total Metals						
Iron	0.15	0.05		mg/L	03/15/2010 2242 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/15/2010 2242 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003168002
(Replaces S1003168001)

Project: Ross ISR
Lab ID: S1003168-001
Client Sample ID: 12-18 OZ
COC: 131163

Work Order: S1003168
Collection Date: 3/10/2010 12:10:00 PM
Date Received: 3/10/2010 4:22:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.99			s.u.	03/10/2010 1210	Field
Conductivity	1812			µmhos/cm	03/10/2010 1210	Field
Dissolved Oxygen (pct)	26.4			%	03/10/2010 1210	Field
Turbidity	1.18			NTU	03/10/2010 1210	Field
Temperature	1.1			°C	03/10/2010 1210	Field
General Parameters						
pH	8.6	0.1		s.u.	03/11/2010 1835 KO	SM 4500 H B
Electrical Conductivity	1900	5		µmhos/cm	03/11/2010 1835 KO	SM 2510B
Total Dissolved Solids (180)	1340	10		mg/L	03/12/2010 1225 AMB	SM 2540
Solids, Total Dissolved (Calc)	1260	10		mg/L	03/16/2010 732 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	531	5		mg/L	03/11/2010 1835 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	03/11/2010 1741 SK	EPA 350.1
Gross Alpha	222 ± 11	2		pCi/L	03/21/2010 1101 SH	SM 7110B
Gross Beta	26.5 ± 4.2	4.10		pCi/L	03/21/2010 1101 SH	SM 7110B
Radon-222	32900±3700	0	L	pCi/L	03/12/2010 521 GD	SM7500-RN
Radium 226	8.16 ± 0.43	0.2		pCi/L	03/19/2010 1345 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/23/2010 153 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	607	5		mg/L	03/11/2010 1835 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	20	5		mg/L	03/11/2010 1835 KO	SM 2320B
Chloride	7	1		mg/L	03/11/2010 2349 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	03/11/2010 1835 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/17/2010 1327 SK	EPA 353.2
Sulfate	480	1		mg/L	03/11/2010 2349 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	03/11/2010 2013 DG	EPA 200.7
Magnesium	2	1		mg/L	03/11/2010 2013 DG	EPA 200.7
Potassium	5	1		mg/L	03/11/2010 2013 DG	EPA 200.7
Sodium	438	1		mg/L	03/11/2010 2013 DG	EPA 200.7

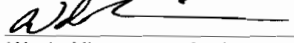
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003168002
(Replaces S1003168001)

Project: Ross ISR
Lab ID: S1003168-001
Client Sample ID: 12-18 OZ
COC: 131163

Work Order: S1003168
Collection Date: 3/10/2010 12:10:00 PM
Date Received: 3/10/2010 4:22:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.94	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Carbonate as CO ₃	0.68	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Chloride	0.20	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Sulfate	9.99	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Calcium	0.27	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Magnesium	0.13	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Potassium	0.11	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Sodium	19.05	0.01		meq/L	03/16/2010 732 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.59	0		meq/L	03/16/2010 732 KO	SM 1030E
Anion Sum	20.87	0		meq/L	03/16/2010 732 KO	SM 1030E
Cation-Anion Balance	3.17	0		%	03/16/2010 732 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/11/2010 2013 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/11/2010 1648 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/11/2010 1648 MS	EPA 200.8
Boron	0.5	0.1		mg/L	03/11/2010 2013 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/11/2010 1648 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/11/2010 2013 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/11/2010 1648 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/11/2010 2013 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/11/2010 1648 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/16/2010 1106 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/11/2010 1648 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/11/2010 2013 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/11/2010 1648 MS	EPA 200.8
Uranium	0.070	0.001		mg/L	03/11/2010 1648 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/11/2010 1648 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/11/2010 2013 DG	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	03/15/2010 2237 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/15/2010 2237 DG	EPA 200.7

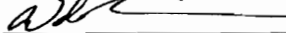
These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 2 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003365001

Project: Ross Project
Lab ID: S1003365-001
Client Sample ID: 12-18SA
COC: 131140

Work Order: S1003365
Collection Date: 3/23/2010 4:30:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.65			s.u.	03/23/2010 1630	Field
Conductivity	811			µmhos/cm	03/23/2010 1630	Field
Dissolved Oxygen	6.14			mg/L	03/23/2010 1630	Field
Dissolved Oxygen (pct)	57.4			%	03/23/2010 1630	Field
Turbidity	4.94			NTU	03/23/2010 1630	Field
Temperature	11.8			°C	03/23/2010 1630	Field
General Parameters						
pH	9.2	0.1		s.u.	03/25/2010 1521 KO	SM 4500 H B
Electrical Conductivity	729	5		µmhos/cm	03/25/2010 1521 KO	SM 2510B
Total Dissolved Solids (180)	500	10		mg/L	03/26/2010 1620 AMB	SM 2540
Solids, Total Dissolved (Calc)	460	10		mg/L	03/30/2010 1212 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	201	5		mg/L	03/25/2010 1521 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	04/05/2010 1500 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	15.8 ± 2.8	3		pCi/L	03/31/2010 000 SH	SM 7110B
Radium 226	0.28 ± 0.10	0.2		pCi/L	04/08/2010 1529 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/08/2010 2140 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	172	5		mg/L	03/25/2010 1521 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	36	5		mg/L	03/25/2010 1521 KO	SM 2320B
Chloride	12	1		mg/L	03/26/2010 2157 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	03/25/2010 1521 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/27/2010 1430 SK	EPA 353.2
Sulfate	163	1		mg/L	03/26/2010 2157 KO	EPA 300.0
Cations						
Calcium	20	1		mg/L	03/25/2010 2017 DG	EPA 200.7
Magnesium	22	1		mg/L	03/25/2010 2017 DG	EPA 200.7
Potassium	22	1		mg/L	03/25/2010 2017 DG	EPA 200.7
Sodium	101	1		mg/L	03/25/2010 2017 DG	EPA 200.7

These results apply only to the samples tested.

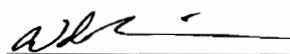
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:



Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003365001

Project: Ross Project
Lab ID: S1003365-001
Client Sample ID: 12-18SA
COC: 131140

Work Order: S1003365
Collection Date: 3/23/2010 4:30:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.81	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Carbonate as CO ₃	1.19	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Chloride	0.33	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Fluoride	ND	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Sulfate	3.38	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Calcium	0.99	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Magnesium	1.83	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Potassium	0.55	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Sodium	4.37	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	7.75	0		meq/L	03/30/2010 1212 KO	SM 1030E
Anion Sum	7.73	0		meq/L	03/30/2010 1212 KO	SM 1030E
Cation-Anion Balance	0.13	0		%	03/30/2010 1212 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/25/2010 2017 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/25/2010 1518 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/25/2010 1518 MS	EPA 200.8
Boron	ND	0.1		mg/L	03/25/2010 2017 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/25/2010 1518 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/25/2010 2017 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/25/2010 1518 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/25/2010 2017 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/25/2010 1518 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 1005 DJ	EPA 245.1
Molybdenum	0.06	0.02		mg/L	03/25/2010 1518 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/25/2010 2017 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/25/2010 1518 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	03/25/2010 1518 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/25/2010 1518 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/25/2010 2017 DG	EPA 200.7
Total Metals						
Iron	0.33	0.05		mg/L	03/26/2010 1623 DG	EPA 200.7
Manganese	0.04	0.02		mg/L	03/26/2010 1623 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003178002
(Replaces S1003178001)

Project: ROSS ISR
Lab ID: S1003178-001
Client Sample ID: 12-18 SM
COC: 128471 & 130499

Work Order: S1003178
Collection Date: 3/11/2010 11:30:00 AM
Date Received: 3/11/2010 3:30:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.25			s.u.	03/11/2010 1130	Field
Conductivity	1487			µmhos/cm	03/11/2010 1130	Field
Dissolved Oxygen (pct)	32.1			%	03/11/2010 1130	Field
Turbidity	1.99			NTU	03/11/2010 1130	Field
Temperature	11.0			°C	03/11/2010 1130	Field
General Parameters						
pH	8.8	0.1		s.u.	03/12/2010 1550 KO	SM 4500 H B
Electrical Conductivity	1420	5		µmhos/cm	03/12/2010 1550 KO	SM 2510B
Total Dissolved Solids (180)	970	10		mg/L	03/12/2010 1330 AMB	SM 2540
Solids, Total Dissolved (Calc)	910	10		mg/L	03/16/2010 722 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	531	5		mg/L	03/12/2010 1550 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	03/19/2010 1158 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/21/2010 1101 SH	SM 7110B
Gross Beta	3.3 ± 1.8	3		pCi/L	03/21/2010 1101 SH	SM 7110B
Radon-222	309±43	28	L	pCi/L	03/12/2010 1713 GD	SM7500-RN
Radium 226	ND	0.2		pCi/L	03/19/2010 1603 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/29/2010 100 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	577	5		mg/L	03/12/2010 1550 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	35	5		mg/L	03/12/2010 1550 KO	SM 2320B
Chloride	5	1		mg/L	03/12/2010 1735 KO	EPA 300.0
Fluoride	2.1	0.1		mg/L	03/12/2010 1550 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/17/2010 1330 SK	EPA 353.2
Sulfate	236	1		mg/L	03/12/2010 1735 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	03/15/2010 2033 DG	EPA 200.7
Magnesium	1	1		mg/L	03/15/2010 2033 DG	EPA 200.7
Potassium	8	1		mg/L	03/15/2010 2033 DG	EPA 200.7
Sodium	341	1		mg/L	03/15/2010 2033 DG	EPA 200.7

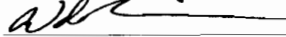
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003178002
(Replaces S1003178001)

Project: ROSS ISR
Lab ID: S1003178-001
Client Sample ID: 12-18 SM
COC: 128471 & 130499

Work Order: S1003178
Collection Date: 3/11/2010 11:30:00 AM
Date Received: 3/11/2010 3:30:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.45	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Carbonate as CO ₃	1.15	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Chloride	0.13	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Fluoride	0.10	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Sulfate	4.91	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Calcium	0.14	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Magnesium	0.10	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Potassium	0.19	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Sodium	14.81	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.26	0		meq/L	03/16/2010 722 KO	SM 1030E
Anion Sum	15.76	0		meq/L	03/16/2010 722 KO	SM 1030E
Cation-Anion Balance	1.62	0		%	03/16/2010 722 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/15/2010 2033 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/12/2010 1152 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/12/2010 1152 MS	EPA 200.8
Boron	0.5	0.1		mg/L	03/15/2010 2033 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/12/2010 1152 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/15/2010 2033 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/12/2010 1152 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/15/2010 2033 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/12/2010 1152 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/16/2010 1109 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/12/2010 1152 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/15/2010 2033 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/12/2010 1152 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/12/2010 1152 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/12/2010 1152 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/15/2010 2033 DG	EPA 200.7
Total Metals						
Iron	0.09	0.05		mg/L	03/15/2010 2244 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/15/2010 2244 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003420001

Project: ROSS ISR
Lab ID: S1003420-002
Client Sample ID: 14-18DM
COC: 131143

Work Order: S1003420
Collection Date: 3/29/2010 11:30:00 AM
Date Received: 3/29/2010 3:31:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.57			s.u.	03/29/2010 1130	Field
Conductivity	2800			µmhos/cm	03/29/2010 1130	Field
Dissolved Oxygen	2.72			mg/L	03/29/2010 1130	Field
Dissolved Oxygen (pct)	25.1			%	03/29/2010 1130	Field
Turbidity	122.0			NTU	03/29/2010 1130	Field
Temperature	11.5			°C	03/29/2010 1130	Field
General Parameters						
pH	10.0	0.1		s.u.	03/30/2010 2128 KO	SM 4500 H B
Electrical Conductivity	2030	5		µmhos/cm	03/30/2010 2128 KO	SM 2510B
Total Dissolved Solids (180)	1220	10		mg/L	03/31/2010 1100 AMB	SM 2540
Solids, Total Dissolved (Calc)	1230	10		mg/L	04/05/2010 906 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	439	5		mg/L	03/30/2010 2128 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	04/05/2010 1543 SK	EPA 350.1
Gross Alpha	13.7 ± 3.2	2		pCi/L	04/11/2010 1217 SH	SM 7110B
Gross Beta	32.3 ± 4.2	3		pCi/L	04/11/2010 1217 SH	SM 7110B
Radon-222	156 ± 26	25	L	pCi/L	03/30/2010 2302 WN	SM7500-RN
Radium 226	0.35 ± 0.11	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/11/2010 2131 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	188	5		mg/L	03/30/2010 2128 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	171	5		mg/L	03/30/2010 2128 KO	SM 2320B
Chloride	449	1		mg/L	03/31/2010 1439 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	03/30/2010 2128 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1450 SK	EPA 353.2
Sulfate	23	1		mg/L	03/31/2010 1439 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	03/30/2010 1959 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/30/2010 1959 DG	EPA 200.7
Potassium	34	1		mg/L	03/30/2010 1959 DG	EPA 200.7
Sodium	460	1		mg/L	03/30/2010 1959 DG	EPA 200.7

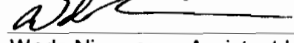
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003420001

Project: ROSS ISR
Lab ID: S1003420-002
Client Sample ID: 14-18DM
COC: 131143

Work Order: S1003420
Collection Date: 3/29/2010 11:30:00 AM
Date Received: 3/29/2010 3:31:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	3.08	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Carbonate as CO ₃	5.69	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Chloride	12.66	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Sulfate	0.47	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Calcium	0.11	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Magnesium	ND	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Potassium	0.86	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Sodium	20.03	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.00	0		meq/L	04/05/2010 906 KO	SM 1030E
Anion Sum	21.98	0		meq/L	04/05/2010 906 KO	SM 1030E
Cation-Anion Balance	2.28	0		%	04/05/2010 906 KO	SM 1030E
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	03/30/2010 1959 DG	EPA 200.7
Arsenic	0.008	0.005		mg/L	03/30/2010 1347 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/30/2010 1347 MS	EPA 200.8
Boron	0.6	0.1		mg/L	03/30/2010 1959 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/30/2010 1347 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/30/2010 1959 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/30/2010 1347 MS	EPA 200.8
Iron	0.06	0.05		mg/L	03/30/2010 1959 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/30/2010 1347 MS	EPA 200.8
Mercury	ND	0.001		mg/L	04/07/2010 945 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/30/2010 1347 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/30/2010 1959 DG	EPA 200.7
Selenium	0.014	0.005		mg/L	03/30/2010 1347 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/30/2010 1347 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/30/2010 1347 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/30/2010 1959 DG	EPA 200.7
Total Metals						
Iron	2.92	0.05		mg/L	03/31/2010 1845 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	03/31/2010 1845 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003377001

Project: ROSS ISR
Lab ID: S1003377-002
Client Sample ID: 14-18OZ
COC: 128499

Work Order: S1003377
Collection Date: 3/25/2010 2:00:00 PM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.42			s.u.	03/25/2010 1400	Field
Conductivity	3630			µmhos/cm	03/25/2010 1400	Field
Dissolved Oxygen	1.93			mg/L	03/25/2010 1400	Field
Dissolved Oxygen (pct)	17.7			%	03/25/2010 1400	Field
Turbidity	154			NTU	03/25/2010 1400	Field
Temperature	11.1			°C	03/25/2010 1400	Field
General Parameters						
pH	8.9	0.1		s.u.	03/26/2010 2058 KO	SM 4500 H B
Electrical Conductivity	2620	5		µmhos/cm	03/26/2010 2058 KO	SM 2510B
Total Dissolved Solids (180)	2020	10		mg/L	03/26/2010 1735 AMB	SM 2540
Solids, Total Dissolved (Calc)	1840	10		mg/L	03/30/2010 1206 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	471	5		mg/L	03/26/2010 2058 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	04/05/2010 1524 SK	EPA 350.1
Gross Alpha	173 ± 10	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	40.2 ± 4.8	4.09		pCi/L	03/31/2010 000 SH	SM 7110B
Radon-222	13500 ± 1500	50		pCi/L	03/27/2010 1443 GD	SM7500-RN
Radium 226	2.31 ± 0.27	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/09/2010 215 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	478	5		mg/L	03/26/2010 2058 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	48	5		mg/L	03/26/2010 2058 KO	SM 2320B
Chloride	10	1		mg/L	03/26/2010 1821 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	03/26/2010 2058 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1410 SK	EPA 353.2
Sulfate	897	1		mg/L	03/26/2010 1821 KO	EPA 300.0
Cations						
Calcium	5	1		mg/L	03/26/2010 1430 DG	EPA 200.7
Magnesium	2	1		mg/L	03/26/2010 1430 DG	EPA 200.7
Potassium	17	1		mg/L	03/26/2010 1430 DG	EPA 200.7
Sodium	624	1		mg/L	03/26/2010 1430 DG	EPA 200.7

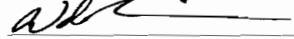
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003377001

Project: ROSS ISR
Lab ID: S1003377-002
Client Sample ID: 14-18OZ
COC: 128499

Work Order: S1003377
Collection Date: 3/25/2010 2:00:00 PM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.84	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Carbonate as CO ₃	1.58	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Chloride	0.27	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Sulfate	18.68	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Calcium	0.23	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Magnesium	0.14	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Potassium	0.42	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Sodium	27.13	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	27.94	0		meq/L	03/30/2010 1206 KO	SM 1030E
Anion Sum	28.41	0		meq/L	03/30/2010 1206 KO	SM 1030E
Cation-Anion Balance	0.83	0		%	03/30/2010 1206 KO	SM 1030E
Dissolved Metals						
Aluminum	0.5	0.1		mg/L	03/26/2010 1430 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/26/2010 1211 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/26/2010 1211 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/26/2010 1430 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/26/2010 1211 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/26/2010 1430 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/26/2010 1211 MS	EPA 200.8
Iron	0.69	0.05		mg/L	03/26/2010 1430 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/26/2010 1211 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 1039 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/26/2010 1211 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/26/2010 1430 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/26/2010 1211 MS	EPA 200.8
Uranium	0.096	0.001		mg/L	03/26/2010 1211 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/26/2010 1211 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	03/26/2010 1430 DG	EPA 200.7
Total Metals						
Iron	3.38	0.05		mg/L	03/30/2010 000 DG	EPA 200.7
Manganese	0.06	0.02		mg/L	03/30/2010 000 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003345001

Project: ROSS Project
Lab ID: S1003345-001
Client Sample ID: 14-18SA
COC: 128497

Work Order: S1003345
Collection Date: 3/24/2010 1:00:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.93			s.u.	03/24/2010 1300	Field
Conductivity	1791			µmhos/cm	03/24/2010 1300	Field
Dissolved Oxygen	3.5			mg/L	03/24/2010 1300	Field
Dissolved Oxygen (pct)	31.8			%	03/24/2010 1300	Field
Turbidity	0.49			NTU	03/24/2010 1300	Field
Temperature	10.6			°C	03/24/2010 1300	Field
General Parameters						
pH	9.3	0.1		s.u.	03/25/2010 1601 KO	SM 4500 H B
Electrical Conductivity	1690	5		µmhos/cm	03/25/2010 1601 KO	SM 2510B
Total Dissolved Solids (180)	1160	10		mg/L	03/26/2010 1225 AMB	SM 2540
Solids, Total Dissolved (Calc)	1100	10		mg/L	03/30/2010 1214 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	453	5		mg/L	03/25/2010 1601 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	04/05/2010 1454 SK	EPA 350.1
Gross Alpha	5.1 ± 2.5	2		pCi/L	03/31/2010 1303 SH	SM 7110B
Gross Beta	12.1 ± 3.7	3.93		pCi/L	03/31/2010 1303 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	04/08/2010 1529 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/08/2010 2140 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	368	5		mg/L	03/25/2010 1601 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	91	5		mg/L	03/25/2010 1601 KO	SM 2320B
Chloride	80	1		mg/L	03/26/2010 2126 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	03/25/2010 1601 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/27/2010 1413 SK	EPA 353.2
Sulfate	314	1		mg/L	03/26/2010 2126 KO	EPA 300.0
Cations						
Calcium	14	1		mg/L	03/25/2010 1749 DG	EPA 200.7
Magnesium	8	1		mg/L	03/25/2010 1749 DG	EPA 200.7
Potassium	17	1		mg/L	03/25/2010 1749 DG	EPA 200.7
Sodium	393	1		mg/L	03/25/2010 1749 DG	EPA 200.7

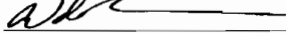
These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003345001

Project: ROSS Project
Lab ID: S1003345-001
Client Sample ID: 14-18SA
COC: 128497

Work Order: S1003345
Collection Date: 3/24/2010 1:00:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.03	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Carbonate as CO ₃	3.02	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Chloride	2.25	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Sulfate	6.53	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Calcium	0.70	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Magnesium	0.62	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Potassium	0.44	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Sodium	17.10	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.86	0		meq/L	03/30/2010 1214 KO	SM 1030E
Anion Sum	17.86	0		meq/L	03/30/2010 1214 KO	SM 1030E
Cation-Anion Balance	2.72	0		%	03/30/2010 1214 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/25/2010 1749 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/25/2010 1430 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/25/2010 1430 MS	EPA 200.8
Boron	0.2	0.1		mg/L	03/25/2010 1749 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/25/2010 1430 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/25/2010 1749 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/25/2010 1430 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/25/2010 1749 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/25/2010 1430 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 956 DJ	EPA 245.1
Molybdenum	0.03	0.02		mg/L	03/25/2010 1430 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/25/2010 1749 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/25/2010 1430 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	03/25/2010 1430 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/25/2010 1430 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/25/2010 1749 DG	EPA 200.7
Total Metals						
Iron	0.10	0.05		mg/L	03/26/2010 1558 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	03/26/2010 1558 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003429001

Project: ROSS ISR
Lab ID: S1003429-001
Client Sample ID: 14-18 SM
COC: 131144

Work Order: S1003429
Collection Date: 3/29/2010 12:30:00 PM
Date Received: 3/29/2010 3:31:00 PM
Sampler: RF
Matrix: Water

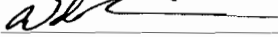
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.56			s.u.	03/29/2010 1230	Field
Conductivity	1569			µmhos/cm	03/29/2010 1230	Field
Dissolved Oxygen	2.39			mg/L	03/29/2010 1230	Field
Dissolved Oxygen (pct)	21.3			%	03/29/2010 1230	Field
Turbidity	2.53			NTU	03/29/2010 1230	Field
Temperature	10.8			°C	03/29/2010 1230	Field
General Parameters						
pH	9.2	0.1		s.u.	03/30/2010 2201 KO	SM 4500 H B
Electrical Conductivity	1480	5		µmhos/cm	03/30/2010 2201 KO	SM 2510B
Total Dissolved Solids (180)	1020	10		mg/L	03/31/2010 1120 AMB	SM 2540
Solids, Total Dissolved (Calc)	920	10		mg/L	04/05/2010 906 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	551	5		mg/L	03/30/2010 2201 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	04/05/2010 1544 SK	EPA 350.1
Gross Alpha	2.8 ± 2.0	2		pCi/L	04/12/2010 804 SH	SM 7110B
Gross Beta	7.2 ± 2.4	3		pCi/L	04/12/2010 804 SH	SM 7110B
Radon-222	300 ± 41	26	L	pCi/L	03/31/2010 204 WN	SM7500-RN
Radium 226	ND	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/11/2010 2131 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	526	5		mg/L	03/30/2010 2201 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	72	5		mg/L	03/30/2010 2201 KO	SM 2320B
Chloride	4	1		mg/L	03/31/2010 1322 KO	EPA 300.0
Fluoride	1.6	0.1		mg/L	03/30/2010 2201 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1458 SK	EPA 353.2
Sulfate	232	1		mg/L	03/31/2010 1322 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	03/30/2010 2015 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/30/2010 2015 DG	EPA 200.7
Potassium	6	1		mg/L	03/30/2010 2015 DG	EPA 200.7
Sodium	350	1		mg/L	03/30/2010 2015 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:	*	Value exceeds Maximum Contaminant Level
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	M	Value exceeds Monthly Ave or MCL
	O	Outside the Range of Dilutions

RL - Reporting Limit

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003429001

Project: ROSS ISR
Lab ID: S1003429-001
Client Sample ID: 14-18 SM
COC: 131144

Work Order: S1003429
Collection Date: 3/29/2010 12:30:00 PM
Date Received: 3/29/2010 3:31:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.61	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Carbonate as CO ₃	2.39	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Chloride	0.09	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Sulfate	4.83	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Calcium	0.08	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Magnesium	ND	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Potassium	0.15	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Sodium	15.24	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.48	0		meq/L	04/05/2010 906 KO	SM 1030E
Anion Sum	16.03	0		meq/L	04/05/2010 906 KO	SM 1030E
Cation-Anion Balance	1.75	0		%	04/05/2010 906 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/30/2010 2015 DG	EPA 200.7
Arsenic	0.012	0.005		mg/L	03/30/2010 1354 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/30/2010 1354 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/30/2010 2015 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/30/2010 1354 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/30/2010 2015 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/30/2010 1354 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/30/2010 2015 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/30/2010 1354 MS	EPA 200.8
Mercury	ND	0.001		mg/L	04/07/2010 956 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/30/2010 1354 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/30/2010 2015 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/30/2010 1354 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/30/2010 1354 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/30/2010 1354 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/30/2010 2015 DG	EPA 200.7
Total Metals						
Iron	0.06	0.05		mg/L	03/31/2010 1854 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/31/2010 1854 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003345001

Project: ROSS Project
Lab ID: S1003345-002
Client Sample ID: 21-19DM
COC: 128497

Work Order: S1003345
Collection Date: 3/24/2010 1:30:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.32			s.u.	03/24/2010 1330	Field
Conductivity	2760			µmhos/cm	03/24/2010 1330	Field
Dissolved Oxygen	2.80			mg/L	03/24/2010 1330	Field
Dissolved Oxygen (pct)	25.2			%	03/24/2010 1330	Field
Turbidity	32.4			NTU	03/24/2010 1330	Field
Temperature	10.8			°C	03/24/2010 1330	Field
General Parameters						
pH	9.7	0.1		s.u.	03/25/2010 1611 KO	SM 4500 H B
Electrical Conductivity	2000	5		µmhos/cm	03/25/2010 1611 KO	SM 2510B
Total Dissolved Solids (180)	1200	10		mg/L	03/26/2010 1230 AMB	SM 2540
Solids, Total Dissolved (Calc)	1220	10		mg/L	03/30/2010 1214 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	408	5		mg/L	03/25/2010 1611 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	04/05/2010 1455 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	16.2 ± 4.4	4.10		pCi/L	03/31/2010 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	04/08/2010 1529 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/08/2010 2140 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	246	5		mg/L	03/25/2010 1611 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	124	5		mg/L	03/25/2010 1611 KO	SM 2320B
Chloride	473	1		mg/L	03/26/2010 2141 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	03/25/2010 1611 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/27/2010 1415 SK	EPA 353.2
Sulfate	11	1		mg/L	03/26/2010 2141 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	03/25/2010 1751 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/25/2010 1751 DG	EPA 200.7
Potassium	23	1		mg/L	03/25/2010 1751 DG	EPA 200.7
Sodium	463	1		mg/L	03/25/2010 1751 DG	EPA 200.7

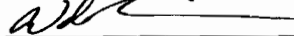
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003345001

Project: ROSS Project
Lab ID: S1003345-002
Client Sample ID: 21-19DM
COC: 128497

Work Order: S1003345
Collection Date: 3/24/2010 1:30:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	4.04	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Carbonate as CO ₃	4.12	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Chloride	13.35	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Sulfate	0.21	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Calcium	0.12	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Potassium	0.59	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Sodium	20.12	0.01		meq/L	03/30/2010 1214 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.83	0		meq/L	03/30/2010 1214 KO	SM 1030E
Anion Sum	21.80	0		meq/L	03/30/2010 1214 KO	SM 1030E
Cation-Anion Balance	2.26	0		%	03/30/2010 1214 KO	SM 1030E
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	03/25/2010 1751 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	03/25/2010 1440 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/25/2010 1440 MS	EPA 200.8
Boron	0.7	0.1		mg/L	03/25/2010 1751 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/25/2010 1440 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/25/2010 1751 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/25/2010 1440 MS	EPA 200.8
Iron	0.06	0.05		mg/L	03/25/2010 1751 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/25/2010 1440 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 959 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/25/2010 1440 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/25/2010 1751 DG	EPA 200.7
Selenium	0.014	0.005		mg/L	03/25/2010 1440 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/25/2010 1440 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/25/2010 1440 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	03/25/2010 1751 DG	EPA 200.7
Total Metals						
Iron	0.73	0.05		mg/L	03/26/2010 1600 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/26/2010 1600 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003378001

Project: ROSS ISR
Lab ID: S1003378-002
Client Sample ID: 21-19OZ
COC: 128498

Work Order: S1003378
Collection Date: 3/25/2010 11:00:00 AM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.11			s.u.	03/25/2010 1100	Field
Conductivity	3020			µmhos/cm	03/25/2010 1100	Field
Dissolved Oxygen	2.31			mg/L	03/25/2010 1100	Field
Dissolved Oxygen (pct)	23.0			%	03/25/2010 1100	Field
Turbidity	9.07			NTU	03/25/2010 1100	Field
Temperature	10.6			°C	03/25/2010 1100	Field
General Parameters						
pH	8.7	0.1		s.u.	03/26/2010 2120 KO	SM 4500 H B
Electrical Conductivity	2190	5		µmhos/cm	03/26/2010 2120 KO	SM 2510B
Total Dissolved Solids (180)	1600	10		mg/L	03/26/2010 1750 AMB	SM 2540
Solids, Total Dissolved (Calc)	1510	10		mg/L	03/30/2010 1204 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	529	5		mg/L	03/26/2010 2120 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	04/05/2010 1526 SK	EPA 350.1
Gross Alpha	33.5 ± 4.7	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	9.2 ± 4.1	3.94		pCi/L	03/31/2010 000 SH	SM 7110B
Radon-222	4580 ± 520	50		pCi/L	03/27/2010 838 GD	SM7500-RN
Radium 226	0.89 ± 0.17	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/09/2010 215 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	586	5		mg/L	03/26/2010 2120 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	29	5		mg/L	03/26/2010 2120 KO	SM 2320B
Chloride	7	1		mg/L	03/26/2010 1842 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	03/26/2010 2120 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1420 SK	EPA 353.2
Sulfate	634	1		mg/L	03/26/2010 1842 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	03/26/2010 1435 DG	EPA 200.7
Magnesium	2	1		mg/L	03/26/2010 1435 DG	EPA 200.7
Potassium	5	1		mg/L	03/26/2010 1435 DG	EPA 200.7
Sodium	537	1		mg/L	03/26/2010 1435 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003378001

Project: ROSS ISR
Lab ID: S1003378-002
Client Sample ID: 21-19OZ
COC: 128498

Work Order: S1003378
Collection Date: 3/25/2010 11:00:00 AM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.60	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Carbonate as CO ₃	0.97	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Chloride	0.19	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Sulfate	13.20	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Calcium	0.32	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Magnesium	0.16	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Potassium	0.12	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Sodium	23.33	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.95	0		meq/L	03/30/2010 1204 KO	SM 1030E
Anion Sum	24.01	0		meq/L	03/30/2010 1204 KO	SM 1030E
Cation-Anion Balance	0.11	0		%	03/30/2010 1204 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/26/2010 1435 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/26/2010 1218 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/26/2010 1218 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/26/2010 1435 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/26/2010 1218 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/26/2010 1435 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/26/2010 1218 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/26/2010 1435 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/26/2010 1218 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 1043 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/26/2010 1218 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/26/2010 1435 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/26/2010 1218 MS	EPA 200.8
Uranium	0.017	0.001		mg/L	03/26/2010 1218 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/26/2010 1218 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/26/2010 1435 DG	EPA 200.7
Total Metals						
Iron	0.18	0.05		mg/L	03/30/2010 014 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/30/2010 014 DG	EPA 200.7

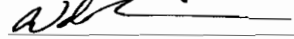
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003365001

Project: Ross Project
Lab ID: S1003365-002
Client Sample ID: 21-19 SA
COC: 131140

Work Order: S1003365
Collection Date: 3/24/2010 11:15:00 AM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.08			s.u.	03/24/2010 1115	Field
Conductivity	973			µmhos/cm	03/24/2010 1115	Field
Dissolved Oxygen	4.69			mg/L	03/24/2010 1115	Field
Dissolved Oxygen (pct)	42.2			%	03/24/2010 1115	Field
Turbidity	0.27			NTU	03/24/2010 1115	Field
Temperature	10.2			°C	03/24/2010 1115	Field
General Parameters						
pH	8.2	0.1		s.u.	03/25/2010 1842 KO	SM 4500 H B
Electrical Conductivity	911	5		µmhos/cm	03/25/2010 1842 KO	SM 2510B
Total Dissolved Solids (180)	620	10		mg/L	03/26/2010 1625 AMB	SM 2540
Solids, Total Dissolved (Calc)	570	10		mg/L	03/30/2010 1212 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	374	5		mg/L	03/25/2010 1842 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	04/05/2010 1507 SK	EPA 350.1
Gross Alpha	6.5 ± 2.2	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	7.4 ± 2.4	3		pCi/L	03/31/2010 000 SH	SM 7110B
Radium 226	0.41 ± 0.12	0.2		pCi/L	04/08/2010 1529 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/09/2010 215 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	456	5		mg/L	03/25/2010 1842 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	03/25/2010 1842 KO	SM 2320B
Chloride	19	1		mg/L	03/26/2010 2212 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	03/25/2010 1842 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.1	0.1		mg/L	03/27/2010 1431 SK	EPA 353.2
Sulfate	112	1		mg/L	03/26/2010 2212 KO	EPA 300.0
Cations						
Calcium	31	1		mg/L	03/25/2010 2019 DG	EPA 200.7
Magnesium	13	1		mg/L	03/25/2010 2019 DG	EPA 200.7
Potassium	7	1		mg/L	03/25/2010 2019 DG	EPA 200.7
Sodium	160	1		mg/L	03/25/2010 2019 DG	EPA 200.7

These results apply only to the samples tested.

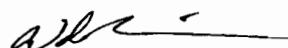
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:


Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003365001

Project: Ross Project
Lab ID: S1003365-002
Client Sample ID: 21-19 SA
COC: 131140

Work Order: S1003365
Collection Date: 3/24/2010 11:15:00 AM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.48	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Chloride	0.53	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Sulfate	2.32	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Calcium	1.52	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Magnesium	1.08	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Potassium	0.17	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Sodium	6.94	0.01		meq/L	03/30/2010 1212 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	9.73	0		meq/L	03/30/2010 1212 KO	SM 1030E
Anion Sum	10.36	0		meq/L	03/30/2010 1212 KO	SM 1030E
Cation-Anion Balance	3.12	0		%	03/30/2010 1212 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/25/2010 2019 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/25/2010 1526 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/25/2010 1526 MS	EPA 200.8
Boron	ND	0.1		mg/L	03/25/2010 2019 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/25/2010 1526 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/25/2010 2019 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/25/2010 1526 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/25/2010 2019 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/25/2010 1526 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 1007 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/25/2010 1526 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/25/2010 2019 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/25/2010 1526 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	03/25/2010 1526 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/25/2010 1526 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	03/25/2010 2019 DG	EPA 200.7
Total Metals						
Iron	0.08	0.05		mg/L	03/26/2010 1625 DG	EPA 200.7
Manganese	0.19	0.02		mg/L	03/26/2010 1625 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003377001

Project: ROSS ISR
Lab ID: S1003377-001
Client Sample ID: 21-19 SM
COC: 128499

Work Order: S1003377
Collection Date: 3/25/2010 12:00:00 PM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.17			s.u.	03/25/2010 1200	Field
Conductivity	1874			µmhos/cm	03/25/2010 1200	Field
Dissolved Oxygen	1.66			mg/L	03/25/2010 1200	Field
Dissolved Oxygen (pct)	15.0			%	03/25/2010 1200	Field
Turbidity	4.06			NTU	03/25/2010 1200	Field
Temperature	10.2			°C	03/25/2010 1200	Field
General Parameters						
pH	9.6	0.1		s.u.	03/26/2010 2049 KO	SM 4500 H B
Electrical Conductivity	1770	5		µmhos/cm	03/26/2010 2049 KO	SM 2510B
Total Dissolved Solids (180)	1270	10		mg/L	03/26/2010 1730 AMB	SM 2540
Solids, Total Dissolved (Calc)	1190	10		mg/L	03/30/2010 1206 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	572	5		mg/L	03/26/2010 2049 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	04/05/2010 1523 SK	EPA 350.1
Gross Alpha	3.1 ± 2.5	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	22.2 ± 4.4	3.96		pCi/L	03/31/2010 000 SH	SM 7110B
Radon-222	353 ± 47	50		pCi/L	03/27/2010 1141 GD	SM7500-RN
Radium 226	ND	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/09/2010 215 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	399	5		mg/L	03/26/2010 2049 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	146	5		mg/L	03/26/2010 2049 KO	SM 2320B
Chloride	3	1		mg/L	03/26/2010 1810 KO	EPA 300.0
Fluoride	1.0	0.1		mg/L	03/26/2010 2049 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1408 SK	EPA 353.2
Sulfate	383	1		mg/L	03/26/2010 1810 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	03/26/2010 1428 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/26/2010 1428 DG	EPA 200.7
Potassium	32	1		mg/L	03/26/2010 1428 DG	EPA 200.7
Sodium	426	1		mg/L	03/26/2010 1428 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003377001

Project: ROSS ISR
Lab ID: S1003377-001
Client Sample ID: 21-19 SM
COC: 128499

Work Order: S1003377
Collection Date: 3/25/2010 12:00:00 PM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.54	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Carbonate as CO ₃	4.88	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Chloride	0.08	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Sulfate	7.98	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Calcium	0.10	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Potassium	0.81	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Sodium	18.54	0.01		meq/L	03/30/2010 1206 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.45	0		meq/L	03/30/2010 1206 KO	SM 1030E
Anion Sum	19.54	0		meq/L	03/30/2010 1206 KO	SM 1030E
Cation-Anion Balance	0.23	0		%	03/30/2010 1206 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/26/2010 1428 DG	EPA 200.7
Arsenic	0.023	0.005		mg/L	03/26/2010 1200 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/26/2010 1200 MS	EPA 200.8
Boron	0.2	0.1		mg/L	03/26/2010 1428 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/26/2010 1200 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/26/2010 1428 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/26/2010 1200 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/26/2010 1428 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/26/2010 1200 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 1034 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/26/2010 1200 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/26/2010 1428 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/26/2010 1200 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	03/26/2010 1200 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/26/2010 1200 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/26/2010 1428 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	03/29/2010 2355 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/29/2010 2355 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003248001

Project: ROSS ISR
Lab ID: S1003248-002
Client Sample ID: 34-18 DM
COC: 128493 & 128494

Work Order: S1003248
Collection Date: 3/17/2010 2:00:00 PM
Date Received: 3/17/2010 4:04:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.91			s.u.	03/17/2010 1400	Field
Conductivity	3380			µmhos/cm	03/17/2010 1400	Field
Dissolved Oxygen	36.0			mg/L	03/17/2010 1400	Field
Turbidity	23.3			NTU	03/17/2010 1400	Field
Temperature	11.2			°C	03/17/2010 1400	Field
General Parameters						
pH	11.7	0.1		s.u.	03/18/2010 2138 KO	SM 4500 H B
Electrical Conductivity	2170	5		µmhos/cm	03/18/2010 2138 KO	SM 2510B
Total Dissolved Solids (180)	870	10		mg/L	03/18/2010 1420 AMB	SM 2540
Solids, Total Dissolved (Calc)	820	10		mg/L	03/23/2010 1040 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	498	5		mg/L	03/18/2010 2138 KO	SM 2320B
Nitrogen, Ammonia (As N)	3.9	0.1		mg/L	03/19/2010 1305 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/31/2010 1303 SH	SM 7110B
Gross Beta	32.6 ± 4.4	4.10		pCi/L	03/31/2010 1303 SH	SM 7110B
Radon-222	ND	29	L	pCi/L	03/19/2010 2138 WN	SM7500-RN
Radium 226	ND	0.2		pCi/L	03/30/2010 1417 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/31/2010 051 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	03/18/2010 2138 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	128	5		mg/L	03/18/2010 2138 KO	SM 2320B
Chloride	139	1		mg/L	03/18/2010 1636 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	03/18/2010 2138 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/26/2010 000 SK	EPA 353.2
Sulfate	29	1		mg/L	03/18/2010 1636 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	03/18/2010 2010 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/18/2010 2010 DG	EPA 200.7
Potassium	44	1		mg/L	03/18/2010 2010 DG	EPA 200.7
Sodium	302	1		mg/L	03/18/2010 2010 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003248001

Project: ROSS ISR
Lab ID: S1003248-002
Client Sample ID: 34-18 DM
COC: 128493 & 128494

Work Order: S1003248
Collection Date: 3/17/2010 2:00:00 PM
Date Received: 3/17/2010 4:04:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Carbonate as CO ₃	4.25	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Chloride	3.93	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Sulfate	0.61	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Calcium	0.19	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Potassium	1.13	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Sodium	13.14	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	14.47	0		meq/L	03/23/2010 1040 KO	SM 1030E
Anion Sum	14.56	0		meq/L	03/23/2010 1040 KO	SM 1030E
Cation-Anion Balance	0.29	0		%	03/23/2010 1040 KO	SM 1030E
Dissolved Metals						
Aluminum	0.4	0.1		mg/L	03/18/2010 2010 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	03/22/2010 1247 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/22/2010 1247 MS	EPA 200.8
Boron	0.3	0.1		mg/L	03/18/2010 2010 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/22/2010 1247 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/18/2010 2010 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/22/2010 1247 MS	EPA 200.8
Iron	0.07	0.05		mg/L	03/18/2010 2010 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/22/2010 1247 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/23/2010 851 BK	EPA 245.1
Molybdenum	0.05	0.02		mg/L	03/22/2010 1247 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/18/2010 2010 DG	EPA 200.7
Selenium	0.008	0.005		mg/L	03/22/2010 1247 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/22/2010 1247 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/22/2010 1247 MS	EPA 200.8
Zinc	0.09	0.01		mg/L	03/18/2010 2010 DG	EPA 200.7
Total Metals						
Iron	0.39	0.05		mg/L	03/22/2010 2250 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/22/2010 2250 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 4 of 6



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003420001

Project: ROSS ISR
Lab ID: S1003420-001
Client Sample ID: 34-180Z
COC: 131143

Work Order: S1003420
Collection Date: 3/29/2010 8:30:00 AM
Date Received: 3/29/2010 3:31:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.39			s.u.	03/29/2010 830	Field
Conductivity	2830			µmhos/cm	03/29/2010 830	Field
Dissolved Oxygen	2.4			mg/L	03/29/2010 830	Field
Dissolved Oxygen (pct)	22.0			%	03/29/2010 830	Field
Turbidity	45.8			NTU	03/29/2010 830	Field
Temperature	10.4			°C	03/29/2010 830	Field
General Parameters						
pH	9.0	0.1		s.u.	03/30/2010 2117 KO	SM 4500 H B
Electrical Conductivity	2070	5		µmhos/cm	03/30/2010 2117 KO	SM 2510B
Total Dissolved Solids (180)	1530	10		mg/L	03/31/2010 1050 AMB	SM 2540
Solids, Total Dissolved (Calc)	1470	10		mg/L	04/05/2010 906 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	496	5		mg/L	03/30/2010 2117 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	04/05/2010 1542 SK	EPA 350.1
Gross Alpha	175.7 ± 9.5	2		pCi/L	04/11/2010 1217 SH	SM 7110B
Gross Beta	43.1 ± 4.6	3		pCi/L	04/11/2010 1217 SH	SM 7110B
Radon-222	35100 ± 4000	50	L	pCi/L	03/30/2010 1959 WN	SM7500-RN
Radium 226	5.97 ± 0.43	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/11/2010 2131 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	499	5		mg/L	03/30/2010 2117 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	52	5		mg/L	03/30/2010 2117 KO	SM 2320B
Chloride	8	1		mg/L	03/31/2010 1205 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	03/30/2010 2117 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1448 SK	EPA 353.2
Sulfate	606	1		mg/L	03/31/2010 1205 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	03/30/2010 1950 DG	EPA 200.7
Magnesium	2	1		mg/L	03/30/2010 1950 DG	EPA 200.7
Potassium	8	1		mg/L	03/30/2010 1950 DG	EPA 200.7
Sodium	542	1		mg/L	03/30/2010 1950 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003420001

Project: ROSS ISR
Lab ID: S1003420-001
Client Sample ID: 34-180Z
COC: 131143

Work Order: S1003420
Collection Date: 3/29/2010 8:30:00 AM
Date Received: 3/29/2010 3:31:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.17	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Carbonate as CO ₃	1.73	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Chloride	0.21	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Sulfate	12.61	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Calcium	0.22	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Magnesium	0.15	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Potassium	0.19	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Sodium	23.56	0.01		meq/L	04/05/2010 906 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.13	0		meq/L	04/05/2010 906 KO	SM 1030E
Anion Sum	22.76	0		meq/L	04/05/2010 906 KO	SM 1030E
Cation-Anion Balance	2.92	0		%	04/05/2010 906 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/30/2010 1950 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/30/2010 1343 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/30/2010 1343 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/30/2010 1950 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/30/2010 1343 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/30/2010 1950 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/30/2010 1343 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/30/2010 1950 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/30/2010 1343 MS	EPA 200.8
Mercury	ND	0.001		mg/L	04/07/2010 939 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/30/2010 1343 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/30/2010 1950 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/30/2010 1343 MS	EPA 200.8
Uranium	0.062	0.001		mg/L	03/30/2010 1343 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/30/2010 1343 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/30/2010 1950 DG	EPA 200.7
Total Metals						
Iron	1.02	0.05		mg/L	03/31/2010 1840 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	03/31/2010 1840 DG	EPA 200.7

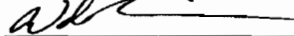
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003248001

Project: ROSS ISR
Lab ID: S1003248-001
Client Sample ID: 34-18 SM
COC: 128493 & 128494

Work Order: S1003248
Collection Date: 3/17/2010 1:00:00 PM
Date Received: 3/17/2010 4:04:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.82			s.u.	03/17/2010 1300	Field
Conductivity	3360			µmhos/cm	03/17/2010 1300	Field
Dissolved Oxygen (pct)	14.0			%	03/17/2010 1300	Field
Turbidity	7.06			NTU	03/17/2010 1300	Field
Temperature	10.5			°C	03/17/2010 1300	Field
General Parameters						
pH	11.6	0.1		s.u.	03/18/2010 2125 KO	SM 4500 H B
Electrical Conductivity	2240	5		µmhos/cm	03/18/2010 2125 KO	SM 2510B
Total Dissolved Solids (180)	1040	10		mg/L	03/18/2010 1415 AMB	SM 2540
Solids, Total Dissolved (Calc)	1000	10		mg/L	03/23/2010 1040 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	521	5		mg/L	03/18/2010 2125 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.9	0.1		mg/L	03/19/2010 1304 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/31/2010 1303 SH	SM 7110B
Gross Beta	18.7 ± 4.1	4.12		pCi/L	03/31/2010 1303 SH	SM 7110B
Radon-222	35 ± 18	28	L	pCi/L	03/19/2010 1835 WN	SM7500-RN
Radium 226	ND	0.2		pCi/L	03/30/2010 1417 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/31/2010 051 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	03/18/2010 2125 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	168	5		mg/L	03/18/2010 2125 KO	SM 2320B
Chloride	6	1		mg/L	03/18/2010 1625 KO	EPA 300.0
Fluoride	1.4	0.1		mg/L	03/18/2010 2125 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/27/2010 1157 SK	EPA 353.2
Sulfate	293	1		mg/L	03/18/2010 1625 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	03/18/2010 2007 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/18/2010 2007 DG	EPA 200.7
Potassium	31	1		mg/L	03/18/2010 2007 DG	EPA 200.7
Sodium	359	1		mg/L	03/18/2010 2007 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003248001

Project: ROSS ISR
Lab ID: S1003248-001
Client Sample ID: 34-18 SM
COC: 128493 & 128494

Work Order: S1003248
Collection Date: 3/17/2010 1:00:00 PM
Date Received: 3/17/2010 4:04:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Carbonate as CO ₃	5.59	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Chloride	0.16	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Fluoride	0.07	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Sulfate	6.10	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Calcium	0.08	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Potassium	0.79	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Sodium	15.60	0.01		meq/L	03/23/2010 1040 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.48	0		meq/L	03/23/2010 1040 KO	SM 1030E
Anion Sum	16.74	0		meq/L	03/23/2010 1040 KO	SM 1030E
Cation-Anion Balance	0.79	0		%	03/23/2010 1040 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/18/2010 2007 DG	EPA 200.7
Arsenic	0.009	0.005		mg/L	03/22/2010 1237 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/22/2010 1237 MS	EPA 200.8
Boron	0.2	0.1		mg/L	03/18/2010 2007 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/22/2010 1237 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/18/2010 2007 DG	EPA 200.7
Copper	0.01	0.01		mg/L	03/22/2010 1237 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/18/2010 2007 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/22/2010 1237 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/23/2010 849 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/22/2010 1237 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/18/2010 2007 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/22/2010 1237 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/22/2010 1237 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/22/2010 1237 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	03/18/2010 2007 DG	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	03/22/2010 2245 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/22/2010 2245 DG	EPA 200.7

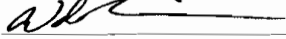
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003441001

Project: ROSS ISR
Lab ID: S1003441-001
Client Sample ID: 34-7DM
COC: 128477


Work Order: S1003441
Collection Date: 3/30/2010 11:30:00 AM
Date Received: 3/30/2010 1:55:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.85			s.u.	03/30/2010 1130	Field
Conductivity	4000			µmhos/cm	03/30/2010 1130	Field
Dissolved Oxygen	7.66			mg/L	03/30/2010 1130	Field
Dissolved Oxygen (pct)	76.0			%	03/30/2010 1130	Field
Turbidity	45.2			NTU	03/30/2010 1130	Field
Temperature	11.6			°C	03/30/2010 1130	Field
General Parameters						
pH	10.0	0.1		s.u.	03/31/2010 1456 KO	SM 4500 H B
Electrical Conductivity	2740	5		µmhos/cm	03/31/2010 1456 KO	SM 2510B
Total Dissolved Solids (180)	1600	10		mg/L	03/31/2010 1300 AMB	SM 2540
Solids, Total Dissolved (Calc)	1770	10		mg/L	04/05/2010 903 KO	SM 1030E
Alkalinity, Total (As CaCO3)	463	5		mg/L	03/31/2010 1456 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.8	0.1		mg/L	04/05/2010 1548 SK	EPA 350.1
Gross Alpha	3.5 ± 2.5	2		pCi/L	04/11/2010 1217 SH	SM 7110B
Gross Beta	19.4 ± 4.1	3		pCi/L	04/11/2010 1217 SH	SM 7110B
Radon-222	ND	25	L	pCi/L	03/31/2010 2115 WN	SM7500-RN
Radium 226	ND	0.2		pCi/L	04/08/2010 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/09/2010 215 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO3	168	5		mg/L	03/31/2010 1456 KO	SM 2320B
Alkalinity, Carbonate as CO3	195	5		mg/L	03/31/2010 1456 KO	SM 2320B
Chloride	699	1		mg/L	03/31/2010 1048 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	03/31/2010 1456 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1507 SK	EPA 353.2
Sulfate	75	1		mg/L	03/31/2010 1048 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	03/31/2010 1554 DG	EPA 200.7
Magnesium	2	1		mg/L	03/31/2010 1554 DG	EPA 200.7
Potassium	32	1		mg/L	03/31/2010 1554 DG	EPA 200.7
Sodium	686	1		mg/L	03/31/2010 1554 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003441001

Project: ROSS ISR
Lab ID: S1003441-001
Client Sample ID: 34-7DM
COC: 128477

Work Order: S1003441
Collection Date: 3/30/2010 11:30:00 AM
Date Received: 3/30/2010 1:55:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.75	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Carbonate as CO ₃	6.50	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Chloride	19.71	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Sulfate	1.55	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Calcium	0.13	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Magnesium	0.12	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Potassium	0.82	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Sodium	29.84	0.01		meq/L	04/05/2010 903 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	30.93	0		meq/L	04/05/2010 903 KO	SM 1030E
Anion Sum	30.57	0		meq/L	04/05/2010 903 KO	SM 1030E
Cation-Anion Balance	0.57	0		%	04/05/2010 903 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/31/2010 1554 DG	EPA 200.7
Arsenic	0.014	0.005		mg/L	04/05/2010 1453 MS	EPA 200.8
Barium	ND	0.5		mg/L	04/05/2010 1453 MS	EPA 200.8
Boron	0.8	0.1		mg/L	03/31/2010 1554 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	04/05/2010 1453 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/31/2010 1554 DG	EPA 200.7
Copper	ND	0.01		mg/L	04/05/2010 1453 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/31/2010 1554 DG	EPA 200.7
Lead	ND	0.02		mg/L	04/05/2010 1453 MS	EPA 200.8
Mercury	ND	0.001		mg/L	04/07/2010 1002 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	04/05/2010 1453 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/31/2010 1554 DG	EPA 200.7
Selenium	0.017	0.005		mg/L	04/05/2010 1453 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	04/05/2010 1453 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	04/05/2010 1453 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	03/31/2010 1554 DG	EPA 200.7
Total Metals						
Iron	1.02	0.05		mg/L	04/01/2010 2206 DG	EPA 200.7
Manganese	ND	0.02		mg/L	04/01/2010 2206 DG	EPA 200.7

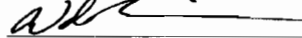
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003440001

Project: ROSS ISR
Lab ID: S1003440-001
Client Sample ID: 34-70Z
COC: 128500

Work Order: S1003440
Collection Date: 3/30/2010 8:45:00 AM
Date Received: 3/30/2010 1:55:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.20			s.u.	03/30/2010 845	Field
Conductivity	2980			µmhos/cm	03/30/2010 845	Field
Dissolved Oxygen	4.26			mg/L	03/30/2010 845	Field
Dissolved Oxygen (pct)	38.6			%	03/30/2010 845	Field
Turbidity	2.94			NTU	03/30/2010 845	Field
Temperature	10.1			°C	03/30/2010 845	Field
General Parameters						
pH	8.7	0.1		s.u.	03/31/2010 1435 KO	SM 4500 H B
Electrical Conductivity	2130	5		µmhos/cm	03/31/2010 1435 KO	SM 2510B
Total Dissolved Solids (180)	1590	10		mg/L	03/31/2010 1250 AMB	SM 2540
Solids, Total Dissolved (Calc)	1460	10		mg/L	04/05/2010 904 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	532	5		mg/L	03/31/2010 1435 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	04/05/2010 1556 SK	EPA 350.1
Gross Alpha	69.1 ± 6.2	2		pCi/L	04/11/2010 1217 SH	SM 7110B
Gross Beta	16.6 ± 3.9	3		pCi/L	04/11/2010 1217 SH	SM 7110B
Radon-222	5900 ± 670	30	L	pCi/L	04/01/2010 018 WN	SM7500-RN
Radium 226	1.38 ± 0.20	0.2		pCi/L	04/08/2010 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/12/2010 157 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	590	5		mg/L	03/31/2010 1435 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	29	5		mg/L	03/31/2010 1435 KO	SM 2320B
Chloride	5	1		mg/L	03/31/2010 906 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	03/31/2010 1435 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1505 SK	EPA 353.2
Sulfate	590	1		mg/L	03/31/2010 906 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	03/31/2010 1550 DG	EPA 200.7
Magnesium	2	1		mg/L	03/31/2010 1550 DG	EPA 200.7
Potassium	7	1		mg/L	03/31/2010 1550 DG	EPA 200.7
Sodium	533	1		mg/L	03/31/2010 1550 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003440001

Project: ROSS ISR
Lab ID: S1003440-001
Client Sample ID: 34-7OZ
COC: 128500

Work Order: S1003440
Collection Date: 3/30/2010 8:45:00 AM
Date Received: 3/30/2010 1:55:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.67	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Carbonate as CO ₃	0.95	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Chloride	0.14	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Sulfate	12.28	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Calcium	0.20	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Magnesium	0.17	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Potassium	0.19	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Sodium	23.17	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.74	0		meq/L	04/05/2010 904 KO	SM 1030E
Anion Sum	23.09	0		meq/L	04/05/2010 904 KO	SM 1030E
Cation-Anion Balance	1.38	0		%	04/05/2010 904 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/31/2010 1550 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	04/05/2010 1439 MS	EPA 200.8
Barium	ND	0.5		mg/L	04/05/2010 1439 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/31/2010 1550 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	04/05/2010 1439 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/31/2010 1550 DG	EPA 200.7
Copper	ND	0.01		mg/L	04/05/2010 1439 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/31/2010 1550 DG	EPA 200.7
Lead	ND	0.02		mg/L	04/05/2010 1439 MS	EPA 200.8
Mercury	ND	0.001		mg/L	04/07/2010 959 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	04/05/2010 1439 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/31/2010 1550 DG	EPA 200.7
Selenium	ND	0.005		mg/L	04/05/2010 1439 MS	EPA 200.8
Uranium	0.041	0.001		mg/L	04/05/2010 1439 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	04/05/2010 1439 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/31/2010 1550 DG	EPA 200.7
Total Metals						
Iron	0.09	0.05		mg/L	04/01/2010 2150 DG	EPA 200.7
Manganese	ND	0.02		mg/L	04/01/2010 2150 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003378001

Project: ROSS ISR
Lab ID: S1003378-001
Client Sample ID: 34-7SA
COC: 128498

Work Order: S1003378
Collection Date: 3/25/2010 10:20:00 AM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.70			s.u.	03/25/2010 1020	Field
Conductivity	1229			µmhos/cm	03/25/2010 1020	Field
Dissolved Oxygen	3.35			mg/L	03/25/2010 1020	Field
Dissolved Oxygen (pct)	30.3			%	03/25/2010 1020	Field
Turbidity	0.66			NTU	03/25/2010 1020	Field
Temperature	10.4			°C	03/25/2010 1020	Field
General Parameters						
pH	9.1	0.1		s.u.	03/26/2010 2109 KO	SM 4500 H B
Electrical Conductivity	1160	5		µmhos/cm	03/26/2010 2109 KO	SM 2510B
Total Dissolved Solids (180)	770	10		mg/L	03/26/2010 1745 AMB	SM 2540
Solids, Total Dissolved (Calc)	720	10		mg/L	03/30/2010 1204 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	497	5		mg/L	03/26/2010 2109 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	04/05/2010 1525 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	7.6 ± 2.2	3		pCi/L	03/31/2010 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/09/2010 215 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	484	5		mg/L	03/26/2010 2109 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	60	5		mg/L	03/26/2010 2109 KO	SM 2320B
Chloride	3	1		mg/L	03/26/2010 1832 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	03/26/2010 2109 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1418 SK	EPA 353.2
Sulfate	134	1		mg/L	03/26/2010 1832 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	03/26/2010 1432 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/26/2010 1432 DG	EPA 200.7
Potassium	10	1		mg/L	03/26/2010 1432 DG	EPA 200.7
Sodium	274	1		mg/L	03/26/2010 1432 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003378001

Project: ROSS ISR
Lab ID: S1003378-001
Client Sample ID: 34-7SA
COC: 128498

Work Order: S1003378
Collection Date: 3/25/2010 10:20:00 AM
Date Received: 3/25/2010 4:05:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.93	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Carbonate as CO ₃	2.00	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Chloride	0.07	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Sulfate	2.77	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Calcium	0.11	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Potassium	0.25	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Sodium	11.90	0.01		meq/L	03/30/2010 1204 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.27	0		meq/L	03/30/2010 1204 KO	SM 1030E
Anion Sum	12.82	0		meq/L	03/30/2010 1204 KO	SM 1030E
Cation-Anion Balance	2.19	0		%	03/30/2010 1204 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/26/2010 1432 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/26/2010 1214 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/26/2010 1214 MS	EPA 200.8
Boron	0.2	0.1		mg/L	03/26/2010 1432 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/26/2010 1214 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/26/2010 1432 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/26/2010 1214 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/26/2010 1432 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/26/2010 1214 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 1041 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/26/2010 1214 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/26/2010 1432 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/26/2010 1214 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/26/2010 1214 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/26/2010 1214 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/26/2010 1432 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	03/30/2010 005 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/30/2010 005 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003440001

Project: ROSS ISR
Lab ID: S1003440-002
Client Sample ID: 34-7SM
COC: 128500

Work Order: S1003440
Collection Date: 3/30/2010 10:45:00 AM
Date Received: 3/30/2010 1:55:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.82			s.u.	03/30/2010 1045	Field
Conductivity	1788			µmhos/cm	03/30/2010 1045	Field
Dissolved Oxygen	2.63			mg/L	03/30/2010 1045	Field
Dissolved Oxygen (pct)	23.1			%	03/30/2010 1045	Field
Turbidity	19.97			NTU	03/30/2010 1045	Field
Temperature	10.6			°C	03/30/2010 1045	Field
General Parameters						
pH	9.4	0.1		s.u.	03/31/2010 1445 KO	SM 4500 H B
Electrical Conductivity	1650	5		µmhos/cm	03/31/2010 1445 KO	SM 2510B
Total Dissolved Solids (180)	1150	10		mg/L	03/31/2010 1255 AMB	SM 2540
Solids, Total Dissolved (Calc)	1110	10		mg/L	04/05/2010 904 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	595	5		mg/L	03/31/2010 1445 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	04/05/2010 1555 SK	EPA 350.1
Gross Alpha	4.7 ± 2.5	2		pCi/L	04/11/2010 1217 SH	SM 7110B
Gross Beta	8.7 ± 3.8	3		pCi/L	04/11/2010 1217 SH	SM 7110B
Radon-222	443 ± 56	26	L	pCi/L	04/01/2010 320 WN	SM7500-RN
Radium 226	0.21 ± 0.08	0.2		pCi/L	04/08/2010 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/12/2010 157 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	508	5		mg/L	03/31/2010 1445 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	107	5		mg/L	03/31/2010 1445 KO	SM 2320B
Chloride	4	1		mg/L	03/31/2010 1454 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	03/31/2010 1445 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/06/2010 1506 SK	EPA 353.2
Sulfate	312	1		mg/L	03/31/2010 1454 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	03/31/2010 1552 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/31/2010 1552 DG	EPA 200.7
Potassium	14	1		mg/L	03/31/2010 1552 DG	EPA 200.7
Sodium	426	1		mg/L	03/31/2010 1552 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/12/2010
Report ID: S1003440001

Project: ROSS ISR
Lab ID: S1003440-002
Client Sample ID: 34-7SM
COC: 128500

Work Order: S1003440
Collection Date: 3/30/2010 10:45:00 AM
Date Received: 3/30/2010 1:55:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.32	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Carbonate as CO ₃	3.56	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Chloride	0.11	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Sulfate	6.49	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Calcium	0.07	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Magnesium	ND	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Potassium	0.35	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Sodium	18.52	0.01		meq/L	04/05/2010 904 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.95	0		meq/L	04/05/2010 904 KO	SM 1030E
Anion Sum	18.55	0		meq/L	04/05/2010 904 KO	SM 1030E
Cation-Anion Balance	1.05	0		%	04/05/2010 904 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/31/2010 1552 DG	EPA 200.7
Arsenic	0.016	0.005		mg/L	04/05/2010 1442 MS	EPA 200.8
Barium	ND	0.5		mg/L	04/05/2010 1442 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/31/2010 1552 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	04/05/2010 1442 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/31/2010 1552 DG	EPA 200.7
Copper	ND	0.01		mg/L	04/05/2010 1442 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/31/2010 1552 DG	EPA 200.7
Lead	ND	0.02		mg/L	04/05/2010 1442 MS	EPA 200.8
Mercury	ND	0.001		mg/L	04/07/2010 1001 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	04/05/2010 1442 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/31/2010 1552 DG	EPA 200.7
Selenium	ND	0.005		mg/L	04/05/2010 1442 MS	EPA 200.8
Uranium	ND	0.001		mg/L	04/05/2010 1442 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	04/05/2010 1442 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/31/2010 1552 DG	EPA 200.7
Total Metals						
Iron	0.80	0.05		mg/L	04/01/2010 2202 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	04/01/2010 2202 DG	EPA 200.7

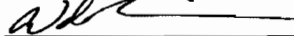
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003244001

Project: ROSS ISR
Lab ID: S1003244-001
Client Sample ID: 42-19DM
COC: 131161

Work Order: S1003244
Collection Date: 3/16/2010 2:10:00 PM
Date Received: 3/16/2010 4:45:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.66			s.u.	03/16/2010 1410	Field
Conductivity	2890			µmhos/cm	03/16/2010 1410	Field
Dissolved Oxygen (pct)	17.4			%	03/16/2010 1410	Field
Turbidity	6.99			NTU	03/16/2010 1410	Field
Temperature	10.9			°C	03/16/2010 1410	Field
General Parameters						
pH	11.5	0.1		s.u.	03/18/2010 1531 KO	SM 4500 H B
Electrical Conductivity	2000	5		µmhos/cm	03/18/2010 1531 KO	SM 2510B
Total Dissolved Solids (180)	940	10		mg/L	03/18/2010 1340 AMB	SM 2540
Solids, Total Dissolved (Calc)	880	10		mg/L	03/23/2010 1038 KO	SM 1030E
Alkalinity, Total (As CaCO3)	481	5		mg/L	03/18/2010 1531 KO	SM 2320B
Nitrogen, Ammonia (As N)	2.5	0.1		mg/L	03/19/2010 1247 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/31/2010 1303 SH	SM 7110B
Gross Beta	34.3 ± 4.3	3.96		pCi/L	03/31/2010 1303 SH	SM 7110B
Radon-222	ND	28	L	pCi/L	03/18/2010 1616 GD	SM7500-RN
Radium 226	ND	0.2		pCi/L	03/30/2010 1138 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/31/2010 051 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO3	ND	5		mg/L	03/18/2010 1531 KO	SM 2320B
Alkalinity, Carbonate as CO3	160	5		mg/L	03/18/2010 1531 KO	SM 2320B
Chloride	182	1		mg/L	03/18/2010 1656 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	03/18/2010 1531 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/17/2010 1523 SK	EPA 353.2
Sulfate	42	1		mg/L	03/18/2010 1656 KO	EPA 300.0
Cations						
Calcium	5	1		mg/L	03/18/2010 1953 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/18/2010 1953 DG	EPA 200.7
Potassium	48	1		mg/L	03/18/2010 1953 DG	EPA 200.7
Sodium	315	1		mg/L	03/18/2010 1953 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003244001

Project: ROSS ISR
Lab ID: S1003244-001
Client Sample ID: 42-19DM
COC: 131161

Work Order: S1003244
Collection Date: 3/16/2010 2:10:00 PM
Date Received: 3/16/2010 4:45:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Carbonate as CO ₃	5.34	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Chloride	5.13	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Sulfate	0.87	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Calcium	0.25	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Potassium	1.22	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Sodium	13.70	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.18	0		meq/L	03/23/2010 1038 KO	SM 1030E
Anion Sum	15.69	0		meq/L	03/23/2010 1038 KO	SM 1030E
Cation-Anion Balance	1.64	0		%	03/23/2010 1038 KO	SM 1030E
Dissolved Metals						
Aluminum	0.4	0.1		mg/L	03/18/2010 1953 DG	EPA 200.7
Arsenic	0.010	0.005		mg/L	03/17/2010 1513 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/17/2010 1513 MS	EPA 200.8
Boron	0.4	0.1		mg/L	03/18/2010 1953 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/17/2010 1513 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/18/2010 1953 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/17/2010 1513 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/18/2010 1953 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/17/2010 1513 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/23/2010 845 BK	EPA 245.1
Molybdenum	0.06	0.02		mg/L	03/17/2010 1513 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/18/2010 1953 DG	EPA 200.7
Selenium	0.008	0.005		mg/L	03/17/2010 1513 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/17/2010 1513 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/17/2010 1513 MS	EPA 200.8
Zinc	0.04	0.01		mg/L	03/18/2010 1953 DG	EPA 200.7
Total Metals						
Iron	0.21	0.05		mg/L	03/19/2010 030 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/19/2010 030 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003178002
(Replaces S1003178001)

Project: ROSS ISR
Lab ID: S1003178-002
Client Sample ID: 42-19 OZ
COC: 128471 & 130499

Work Order: S1003178
Collection Date: 3/11/2010 1:30:00 PM
Date Received: 3/11/2010 3:30:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.12			s.u.	03/11/2010 1330	Field
Conductivity	2830			µmhos/cm	03/11/2010 1330	Field
Dissolved Oxygen (pct)	21.2			%	03/11/2010 1330	Field
Turbidity	4.41			NTU	03/11/2010 1330	Field
Temperature	10.9			°C	03/11/2010 1330	Field
General Parameters						
pH	8.6	0.1		s.u.	03/12/2010 1600 KO	SM 4500 H B
Electrical Conductivity	2080	5		µmhos/cm	03/12/2010 1600 KO	SM 2510B
Total Dissolved Solids (180)	1500	10		mg/L	03/12/2010 1335 AMB	SM 2540
Solids, Total Dissolved (Calc)	1440	10		mg/L	03/16/2010 722 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	477	5		mg/L	03/12/2010 1600 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	03/19/2010 1159 SK	EPA 350.1
Gross Alpha	19.4 ± 3.8	2		pCi/L	03/23/2010 1405 SH	SM 7110B
Gross Beta	4.2 ± 4.0	3.97		pCi/L	03/23/2010 1405 SH	SM 7110B
Radon-222	6460±740	30	L	pCi/L	03/12/2010 1935 GD	SM7500-RN
Radium 226	1.38 ± 0.18	0.2		pCi/L	03/19/2010 1603 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/23/2010 153 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	539	5		mg/L	03/12/2010 1600 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	21	5		mg/L	03/12/2010 1600 KO	SM 2320B
Chloride	5	1		mg/L	03/12/2010 1752 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	03/12/2010 1600 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/17/2010 1331 SK	EPA 353.2
Sulfate	638	1		mg/L	03/12/2010 1752 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	03/15/2010 2035 DG	EPA 200.7
Magnesium	2	1		mg/L	03/15/2010 2035 DG	EPA 200.7
Potassium	6	1		mg/L	03/15/2010 2035 DG	EPA 200.7
Sodium	499	1		mg/L	03/15/2010 2035 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003178002
(Replaces S1003178001)

Project: ROSS ISR
Lab ID: S1003178-002
Client Sample ID: 42-19 OZ
COC: 128471 & 130499

Work Order: S1003178
Collection Date: 3/11/2010 1:30:00 PM
Date Received: 3/11/2010 3:30:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.83	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Carbonate as CO ₃	0.70	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Chloride	0.12	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Sulfate	13.27	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Calcium	0.30	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Magnesium	0.18	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Potassium	0.16	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Sodium	21.72	0.01		meq/L	03/16/2010 722 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	22.37	0		meq/L	03/16/2010 722 KO	SM 1030E
Anion Sum	22.96	0		meq/L	03/16/2010 722 KO	SM 1030E
Cation-Anion Balance	1.29	0		%	03/16/2010 722 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/15/2010 2035 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/12/2010 1203 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/12/2010 1203 MS	EPA 200.8
Boron	0.3	0.1		mg/L	03/15/2010 2035 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/12/2010 1203 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/15/2010 2035 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/12/2010 1203 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/15/2010 2035 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/12/2010 1203 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/16/2010 1114 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/12/2010 1203 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/15/2010 2035 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/12/2010 1203 MS	EPA 200.8
Uranium	0.011	0.001		mg/L	03/12/2010 1203 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/12/2010 1203 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/15/2010 2035 DG	EPA 200.7
Total Metals						
Iron	0.11	0.05		mg/L	03/15/2010 2246 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/15/2010 2246 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003244001

Project: ROSS ISR
Lab ID: S1003244-002
Client Sample ID: 42-19SM
COC: 131161

Work Order: S1003244
Collection Date: 3/16/2010 2:50:00 PM
Date Received: 3/16/2010 4:45:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.34			s.u.	03/16/2010 1450	Field
Conductivity	1897			µmhos/cm	03/16/2010 1450	Field
Dissolved Oxygen (pct)	30.2			%	03/16/2010 1450	Field
Turbidity	40.2			NTU	03/16/2010 1450	Field
Temperature	10.8			°C	03/16/2010 1450	Field
General Parameters						
pH	11.5	0.1		s.u.	03/18/2010 1544 KO	SM 4500 H B
Electrical Conductivity	1690	5		µmhos/cm	03/18/2010 1544 KO	SM 2510B
Total Dissolved Solids (180)	830	10		mg/L	03/18/2010 1350 AMB	SM 2540
Solids, Total Dissolved (Calc)	730	10		mg/L	03/23/2010 1038 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	420	5		mg/L	03/18/2010 1544 KO	SM 2320B
Nitrogen, Ammonia (As N)	2.8	0.1		mg/L	03/19/2010 1248 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	03/31/2010 1303 SH	SM 7110B
Gross Beta	10.8 ± 3.8	4.08		pCi/L	03/31/2010 1303 SH	SM 7110B
Radon-222	ND	28	L	pCi/L	03/18/2010 1919 GD	SM7500-RN
Radium 226	ND	0.2		pCi/L	03/30/2010 1417 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	03/31/2010 051 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	03/18/2010 1544 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	137	5		mg/L	03/18/2010 1544 KO	SM 2320B
Chloride	7	1		mg/L	03/18/2010 1713 KO	EPA 300.0
Fluoride	1.6	0.1		mg/L	03/18/2010 1544 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/17/2010 1525 SK	EPA 353.2
Sulfate	179	1		mg/L	03/18/2010 1713 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	03/18/2010 1956 DG	EPA 200.7
Magnesium	ND	1		mg/L	03/18/2010 1956 DG	EPA 200.7
Potassium	17	1		mg/L	03/18/2010 1956 DG	EPA 200.7
Sodium	275	1		mg/L	03/18/2010 1956 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 3/31/2010
Report ID: S1003244001

Project: ROSS ISR
Lab ID: S1003244-002
Client Sample ID: 42-19SM
COC: 131161

Work Order: S1003244
Collection Date: 3/16/2010 2:50:00 PM
Date Received: 3/16/2010 4:45:00 PM
Sampler: MW
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Carbonate as CO ₃	4.55	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Chloride	0.20	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Sulfate	3.72	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Calcium	0.12	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Magnesium	ND	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Potassium	0.43	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Sodium	11.97	0.01		meq/L	03/23/2010 1038 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.53	0		meq/L	03/23/2010 1038 KO	SM 1030E
Anion Sum	12.41	0		meq/L	03/23/2010 1038 KO	SM 1030E
Cation-Anion Balance	0.47	0		%	03/23/2010 1038 KO	SM 1030E
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	03/18/2010 1956 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	03/17/2010 1517 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/17/2010 1517 MS	EPA 200.8
Boron	0.3	0.1		mg/L	03/18/2010 1956 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/17/2010 1517 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/18/2010 1956 DG	EPA 200.7
Copper	0.02	0.01		mg/L	03/17/2010 1517 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/18/2010 1956 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/17/2010 1517 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/23/2010 847 BK	EPA 245.1
Molybdenum	0.05	0.02		mg/L	03/17/2010 1517 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/18/2010 1956 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/17/2010 1517 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/17/2010 1517 MS	EPA 200.8
Vanadium	0.02	0.02		mg/L	03/17/2010 1517 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/18/2010 1956 DG	EPA 200.7
Total Metals						
Iron	0.66	0.05		mg/L	03/19/2010 033 DG	EPA 200.7
Manganese	ND	0.02		mg/L	03/19/2010 033 DG	EPA 200.7

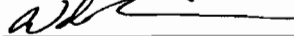
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Addendum 2.7-J

SAMPLING INFORMATION

Sampling Point 12-18DM Project ROSS ISR

Location _____ W.O.# _____

Sample ID# 12-18DM Date Sampled 6 / 18 / 2010 Time 1400 am pm

Describe Sampling Point _____

Well Depth 632 ft below MP Depth to Water (below MP) 175.54 ft

Casing Diameter 5 in

Date 6 / 18 / 2010 Time 0946 am pm

Casing Volume 457 gal 1371

At least — bore volumes have been evacuated before sampling

Sampling method Submersible pump 1HP

Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for ORP

DISCHARGE RATE

_____ gpm

x 0.00223

_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. (mg/l and %)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>1125</u>							<u>6</u>
<u>1200</u>	<u>11.01</u>	<u>2.82MS</u>	<u>12.9</u>	<u>1.67</u>			<u>4</u>
<u>1230</u>	<u>11.35</u>	<u>2.90MS</u>	<u>12.9</u>	<u>1.78</u>			<u>4</u>
<u>1300</u>	<u>12.17</u>	<u>3.06MS</u>	<u>13.2</u>	<u>3.03</u>			<u>2.5</u>
<u>1310</u>	<u>Ran out of H2O - Let recharge</u>						
<u>1400</u>	<u>12.23</u>	<u>3.08MS</u>	<u>12.4</u>	<u>6.54</u>	<u>1.14 / 10.9</u>	<u>- 221</u>	<u>3.0</u>

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Collected water for 4.14 Dis. & dup. analysis

Form completed by: Bob Fuller

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-1802 Project ROSS ISR
Location _____ W.O.# _____
Sample ID# 12-1802 Date Sampled 6 / 18 / 2010 Time 1100 (am) pm
Describe Sampling Point _____

Well Depth 584 ft below MP Depth to Water (below MP) 169.79 ft Casing Diameter 5 in
Date 6 / 18 / 2010 Time 0940 (am) pm Casing Volume 414 gal 1242

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump 2HP
Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. (mg/l and %)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>0945</u>							<u>19.0</u>
<u>1000</u>	<u>8.97</u>	<u>1568µS</u>	<u>12.7</u>	<u>8.29</u>			
<u>1015</u>	<u>- Ran out of water - let recharge ?</u>						
<u>1045</u>	<u>9.03</u>	<u>1617µS</u>	<u>12.3</u>	<u>1.16</u>			<u>18.0</u>
<u>1100</u>	<u>9.02</u>	<u>1654</u>	<u>12.4</u>	<u>0.97</u>	<u>1.83/18.3%</u>	<u>95µl</u>	<u>18.0</u>
<u>1105</u>	<u>- Ran out of water again ?</u>						

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Collected Water for 4.14 Dis. and Spec. analysis -
Gave samples and C.O.C. to Jason A.

Form completed by: Bob Fuller

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-18 SM Project ROSS ISR
Location _____ W.O.# _____
Sample ID# 12-18 SM Date Sampled 6 1 18 2010 Time 1445 am ☒ pm
Describe Sampling Point _____

Well Depth 352 ft below MP Depth to Water (below MP) 90.88 ft Casing Diameter 5 in
Date 6 1 18 2010 Time 0952 (am) pm Casing Volume 261 gal 783

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump 1/2 hp
Tap _____ Bailer _____

DISCHARGE RATE

_____ gpm

x 0.00223

Pump intake or bailer set at _____ ft below MP. _____ cfs

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for ORP

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. (mg/l and %)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1200							6
1245	9.34	1441 µS	12.1	1.57			5
13 ³⁰ 45	9.25	1464 µS	11.7	1.10			5
1445	9.22	1436 µS	11.8	0.54	0.75/6.9	-190 mV	5

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Collected water for 4.14 Dis & Susp. analysis.

Form completed by: Joel Fuller

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-18SA Project Ross ISZ
Location _____ W.O.# _____
Sample ID# 12-18SA Date Sampled 6/5/10 Time 13:00 (am) pm
Describe Sampling Point 5" Well

Well Depth (3' to screen), (63' to Bore) ft below MP Depth to Water (below MP) 48.03 ft Casing Diameter 5" in
Date 6/5/10 Time 10:40 (am) pm Casing Volume ~53 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump
' Tap ' Bailer _____

Pump intake or bailer set at -100' ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____	gpm
x	0.00223
_____	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU) / ORP (mV)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>11:20</u>	<u>11.19</u>	<u>749</u>	<u>15.0</u>	<u>10.70 / 87*</u>	<u>65.50</u>	<u>+30</u>	<u>1 gpm</u>
<u>11:40</u>	<u>11.55</u>	<u>763</u>	<u>14.3</u>	<u>7.92 / -35</u>	<u>68.70</u>	<u>+50</u>	<u>1</u>
<u>12:05</u>	<u>8.90</u>	<u>881</u>	<u>15.8</u>	<u>19.21 / -37</u>	<u>77.2</u>	<u>+75</u>	<u>" Pumped off let sit for 5 min</u>
<u>12:25</u>	<u>8.56</u>	<u>887</u>	<u>15.8</u>	<u>23.8 / N/A</u>	<u>76.4</u>	<u>~90</u>	<u>~.75</u>
<u>12:55</u>	<u>8.34</u>	<u>911</u>	<u>14.7</u>	<u>54.4 / -113</u>	<u>77.1</u>	<u>100*</u>	<u>~.50</u>
<u>13:05</u>	<u>8.30</u>	<u>945</u>	<u>13.9</u>	<u>74.9 / -118</u>	<u>78.2</u>	<u>110*</u>	

Pumping Start Time 12:50 WL 37.5 Pumping End Time 13:05 WL 78.2

Comments: DO METER WONT STABILIZE... ORP took ~10 min to stabilize from +80 to -35 mV. Pumped off @ 12:30, let recover for 15 min

Form completed by: Ben Sullivan Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18 DM Project LOSS ISR
Location _____ W.O.# _____
Sample ID# 14-18 DM Date Sampled 6/16/2010 Time _____ am ☒ pm
Describe Sampling Point _____

Well Depth 632 ft below MP Depth to Water (below MP) 156.65 ft Casing Diameter 5 in
Date 6/16/2010 Time 0930 (am/pm) Casing Volume 475 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ☒ Submersible pump ☐ 1AP
☐ Tap ☐ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1355	_____	_____	_____	28.5	_____	_____	7.0
1430	10.04	2.83 mS	12.3	2.85	_____	_____	3.0
1530	10.07	2.83 mS	13.4	2.85 30.3	_____	_____	2.5
1535	ran out of water - let recharge				_____	_____	_____
1630	10.06	2.86 µS	12.1	31.2	1.97/18.6%	_____	2.5

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: 3 CV = 1426 gal - Collected water for 4.14 Dis. c'
Sus. Analysis

ORP = -13 mV

Form completed by: Rob Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-1802 Project ROSS ISR
Location _____ W.O.# _____
Sample ID# 14-1802 Date Sampled 6/16/2010 Time 1330 am ☒ pm
Describe Sampling Point _____

Well Depth 530 ft below MP Depth to Water (below MP) 155.17 ft Casing Diameter 5 in
Date 5/17/10 Time 0917 am ☒ pm Casing Volume 375 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump 2HF
Tap _____ Bailer _____

DISCHARGE RATE

_____ gpm
x 0.00223

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. Water Level (nearest 0.04 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1110						540	18.0
1130	9.21	3.40mS	12.1°C	188	9.21	360	12.0
1230	9.14	3.57mS	12.6°C	82.3		333	11.0
1330	9.07	3.66mS	14.0°C	25.0	1.44/13.9%		

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Unanalysed for GLB-GW, Uran Sup., T. Metal Sup.,
4.14 Dis. & Sus., and ORP

ORP = +42 mV

Form completed by: Bob Fuller Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-185M Project ROSS ISR
Location _____ W.O.# _____
Sample ID# 14-185M Date Sampled 6/16/2010 Time 1645 am pm
Describe Sampling Point _____

Well Depth 352 ft below MP Depth to Water (below MP) 66.72 ft Casing Diameter 5 in
Date 6/16/2010 Time 0938 am pm Casing Volume 285 gal 852

At least 3+ bore volumes have been evacuated before sampling

Sampling method ☒ Submersible pump ☐ 1/2 HP
☐ Tap ☐ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1415				0.90			7.0
1445	9.90	1547 µS	11.9	0.90		210	7.0
1545	9.65	1544 µS	11.6	1.18		420	7.0
1645	9.64	1548 µS	11.2	0.60	1.04 / 10.2%	420	7.0

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: Collected water for 4.14 Dis. & Sus. analysis

ORP = +96 mV

Form completed by:

Rob Fuller

Witnessed by: _____

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SAMPLING INFORMATION

Sampling Point 14-18SA Project ROSS ISR
Location _____ W.O.# _____
Sample ID# 14-18SA Date Sampled 6/15/10 Time 15:30 am pm
Describe Sampling Point 5" Monitor Well

Well Depth 40 ^{to 5' (18" - 80' to Bottom?)} ft below MP Depth to Water (below MP) 22.78 ft Casing Diameter 5" in
Date 6/15/10 Time 13:35 am pm Casing Volume 60? gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump
' Tap ' Bailer _____

Pump Intake or bailer set at ~78' ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____	gpm
x <u>0.00223</u>	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU) ^{ORP mV}	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
14:00	8.83	1980	12.1	1.90/-195	27.9	30+	1.5 gpm
14:20	9.16	1910	12.1	0.91/-170	28.4	60+	"
14:40	9.51	1913	12.2	0.75/-34	28.5	90	"
15:00	9.20	1904	12.0	0.46/-103	28.65	120	"
15:20	8.93	1912	12.0	0.50/-103	28.75	150	"
15:30	8.81	1909	12.4	0.61/-103	28.80	165+	"

Pumping Start Time 13:40 WL 22.60 Pumping End Time 15:50 WL 28.8

Comments: Well makes plenty of water, took field duplicate, ID# 14-18SA
took duplicate @ 15:35 pH=8.71 EC=1933µS T=12.3°C Turb=0.49ntu
ORP=-103mV

Form completed by: Ben Sullivan Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19 DM Project STRATA / ROSS
Location 44.56997/-104.95779 W.O.# 09142
Sample ID# 21-19 DM Date Sampled 5 / 19 / 10 Time 1520 am pm
Describe Sampling Point _____

Well Depth 580 ft below MP Depth to Water (below MP) 196.09 ft Casing Diameter 5 in
Date 5 / 19 / 10 Time 1250 am pm 342.76 (RA) Casing Volume 309 gal 1152

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1345	10.03	1912	13.0	3.94	164.95	155	2.9
1405	10.09	1867	13.2	4.06	172.86	213	2.5
1425	10.05	1873	13.8	10.86	110.56	263	1.8
1450	9.97	1866	13.9	29.8	91.91	308	1.5
1515	10.01	1874	14.0	35.4	74.35	346	1.2

Pumping Start Time 1302 WL 342.76 Pumping End Time 1525 WL _____

Comments: BEGAN PUMPING AT 4.7 GPM WATER WAS VISIBLY MORE TURBID @ 1450

1315 = 276.98

1330 = 216.44 / 3.2 GPM

ORP = +83 DO = 42.6% 4.26 mg/L

Form completed by: J. Roares Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-1902 Project STRATA /ROSS
 Location 44.56997/-104.95779 W.O.# 09142
 Sample ID# 21-1902 Date Sampled 5 / 19 / 10 Time 1220 am ☒ pm
 Describe Sampling Point _____

Well Depth 467 ft below MP Depth to Water (below MP) 218.18 ft Casing Diameter 5 in
 Date 5 / 19 / 10 Time 1030 ☒ am ☐ pm Casing Volume 249 gal 746

At least N/A bore volumes have been evacuated before sampling

Sampling method Submersible pump
 Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1135	8.83	2660	12.2	1.19	127.44	341	13.6
1155	8.96	2640	11.9	2.06	122.67	614	13.6
1220	8.99	2630	12.1	1.30	120.21	954	13.6

Pumping Start Time 1110 WL 209.62 Pumping End Time 1225 WL _____

Comments: BEGAN PUMPING AT 15.0 GPM

11:20 143.13 - 14.2 GPM

ORP = +94 DO = 24.7% 2.52 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19 SM Project STRATA / ROSS
Location 44.56997/-104.95779 W.O.# 09142
Sample ID# 21-19 SM Date Sampled 5 / 19 / 10 Time 1830 am ☒ pm
Describe Sampling Point _____

Well Depth 320 ft below MP Depth to Water (below MP) 84.88 ft Casing Diameter 5 in
Date 5 / 19 / 10 Time 1530 am ☒ pm 143.84 Casing Volume 235 gal 705

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1600	11.49	1772	11.6	1.12	115.73	98	4.9
1622	10.76	1648	11.7	0.64	113.04	206	4.9
1655	10.39	1679	11.4	0.65	112.28	368	4.9
1730	10.25	1718	11.8	0.44	110.96	490	4.9
1800	10.06	1721	11.6	0.20	110.59	637	4.9
1825	9.97	1719	11.5	0.12	110.70	760	4.9

Pumping Start Time 1540 WL 143.84 Pumping End Time _____ WL _____

Comments: BEGAN PUMPING AT 4.9 GPM

1636 = 113.16 / 4.9 GPM WELL IS MAINTAINING 4.9 GPM

ORP = +36 DO = 18.7% 1.98 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19 SA Project STRATA / ROSS
 Location 44.57014/-104.95768 W.O.# 2009142
 Sample ID# 21-19 SA Date Sampled 6 / 18 / 10 Time 1115 am ☒ pm
 Describe Sampling Point _____

Well Depth 40 ft below MP Depth to Water (below MP) 10.82 ft Casing Diameter 2 in
 Date 6 / 18 / 10 Time 1000 ☒ am ☐ pm Casing Volume N/A gal

At least N/A bore volumes have been evacuated before sampling

Sampling method ☐ Submersible pump ☒ Bladder pump / low flow
☐ Tap ☐ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: PLASTIC). (☒ New or ☐ previously used) was used to collect all samples (☒ yes or ☐ no)
 and all field measurements (☒ yes or ☐ no). Tubing used only for N/A

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1030	8.16	881	10.7	113	10.88	2.5	200 ml / 30 sec
1035	8.30	868	9.3	103	11.06	3.0	↓
1040	8.39	871	9.3	107	11.24	3.5	↓
1045	8.44	863	9.3	99.4	11.33	4.0	↓

Pumping Start Time 1015 WL 10.66 Pumping End Time 1119 WL 11.81

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

Form completed by: J. ROGERS LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 34-18 DM Project SIRATA/ROSS
Location 44.5117/-104.95072 W.O.# 09142
Sample ID# 34-18 DM Date Sampled 5 / 18 / 10 Time 1435 am pm
Describe Sampling Point _____

Well Depth 640 ft below MP Depth to Water (below MP) 272.57 ft Casing Diameter 5 in
Date 5 / 18 / 10 Time 1240 am pm 309.58 22 Casing Volume 367 gal 1102

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump
Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1330	10.50	1809	15.4	3.71	274.79		1.68pm
1400	10.73	1807	15.7	4.01	256.07		
1430	10.90	1779	15.9	5.29	239.76		

Pumping Start Time 1255 WL 309.58 Pumping End Time _____ WL 218.40

Comments: BEGAN PUMPING AT 12PM

ORP: +77 DO: 57.4% 5.42 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 02 Project STRATA / ROSS
Location 44.57134/-104.95088 W.O.# 09142
Sample ID# 34-18 02 Date Sampled 5 / 18 / 10 Time 1200 am ☒ pm
Describe Sampling Point _____

Well Depth 570 ft below MP Depth to Water (below MP) 282.71 ft Casing Diameter 5 in
Date 5 / 18 / 10 Time 1010 ☒ am 164.38 pm Casing Volume 287 gal 862

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump _____ gpm
' Tap ' Bailer _____ x 0.00223

Pump intake or bailer set at _____ ft below MP. _____ cfs

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1100	9.27	1955	12.6	16.33	71.52	321	10.76 gpm
1130	9.19	1947	12.5	5.03	63.66	639	10.6
1200	9.18	1930	12.7	3.26	59.11	957	10.6

Pumping Start Time 1030 WL 282.71 (164.38) Pumping End Time 1220 WL _____

Comments: BEGAN PUMPING AT 13.6 GPM PULLED A FIELD DUP (FD-1)

1040 = 94.15, 10.76 gpm 1115 = 66.52, 10.6 gpm

1100 = 71.52, 10.76 gpm 1145 = 62.03, 10.8 gpm

ORP = +102 DO = ~~64.90%~~ / ~~6.33 mg/L~~

Form completed by: J. ROGERS Witnessed by: _____

DUPLICATE FIELD PARAMETERS:

1210 9.20 1925 13.0 2.21 +102 23.8% 2.47 mg/L

SAMPLING INFORMATION

Sampling Point 34-18 SM Project STRATA / ROSS
 Location 44.57117/-104.95072 W.O.# 09142
 Sample ID# 005071004 Date Sampled 5 / 18 / 10 Time 1450 am pm
 Describe Sampling Point 34-18 SM

Well Depth 307 ft below MP Depth to Water (below MP) 136.19 ft Casing Diameter 5 in
 Date 5 / 18 / 10 Time 1240 am pm Casing Volume 171 gal 512

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump '
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED) (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1335	12.53	2620	19.0	6.48	154.31		0.5
1405	12.54	2620	18.5	5.63	167.40		↓
1445	12.61	2610	18.4	5.79	186.21		

Pumping Start Time 1255 WL 136.19 Pumping End Time 1500 WL 201.41

Comments: BEGAN PUMPING AT 0.5 GPM

ORP = +68 DO = 85.2% 8.15 mg/L

Form completed by: _____ Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7 DM Project STRATA / ROSS
 Location 44.58737 / -104.94756 W.O.# 09142
 Sample ID# 34-7 DM Date Sampled 5 / 20 / 10 Time 1335 am pm
 Describe Sampling Point _____

Well Depth 550 ft below MP Depth to Water (below MP) 87.81 ft Casing Diameter 5 in
 Date 5 / 20 / 10 Time _____ am pm 369.00 (22) Casing Volume 462 gal (387)

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1223	10.69	3390	12.5	11.48	261.68	112	5.6
1240	10.81	3360	12.3	11.04	194.41	207	3.8
1308	10.98	3380	12.5	80.8	96.00	313	3.0
1330	10.92	3370	13.7	48.9	47.32	379	3.0

Pumping Start Time 1203 WL 369.00 Pumping End Time 1335 WL 36.35

Comments: BEGAN PUMPING AT 5.7 GPM

1215-302.69

ORP = +49 DO = 74.9% 7.77 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7 02 Project STRATA / ROSS
 Location 44.58737/-104.94756 W.O.# 09142
 Sample ID# 34-7 02 Date Sampled 5 / 20 / 10 Time 1125 am pm
 Describe Sampling Point _____

Well Depth 380 ft below MP Depth to Water (below MP) 84.88 ft Casing Diameter 5 in
202.13 (H2)
 Date 5 / 20 / 10 Time 1000 am pm Casing Volume 295 gal 885

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1040	9.26	1998	11.7	1.55	169.93	301	18.8
1100	9.25	2570	11.7	0.51	168.47	677	17.6
1120	9.29	1992	11.6	0.80	167.78	1029	17.6

Pumping Start Time 1024 WL 202.13 Pumping End Time _____ WL _____

Comments: BEGAN PUMPING AT 18.8 GPM

ORP = +106 DO 35.4% 3.77 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7SA Project Rosa FSR
Location _____ W.O.# _____
Sample ID# 34-7SA Date Sampled 6/15/10 Time 10:00 am pm
Describe Sampling Point 5" Well

Well Depth 42.2 ft below MP Depth to Water (below MP) 22.92 ft Casing Diameter 5 in
Date 6/15/10 Time 08:30 am pm Casing Volume 110 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump
Tap _____ Bailer _____

Pump intake or bailer set at ~50 ft below MP.

Tubing (type: USED). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____	gpm
x	0.00223
_____	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
08:55	10.75	1415 1289	11.5	8.22/103	36.4	~30	2 gpm
09:15	10.15	1285	12.3	1.92/109	39.1	~45	1 gpm
09:30	9.85	1319	12.5	0.79/109	39.4	~60	"
09:45	9.65	1320	12.5	0.87/167	39.7	~75	"
10:00	9.57	1325	12.8	0.60/163	39.95	~90	"

Pumping Start Time 08:40 WL 22.9 Pumping End Time 10:20 WL -

Comments: Stabilized @ 2 gpm, then pumped off @ 09:00, reduced rate to 1 gpm
-UNABLE to get D.O. to STABILIZE...

Form completed by: Bob Schiffer Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7 SM Project STRATH ROCK
Location 44.58737/-104.94756 W.O.# 09142
Sample ID# 34-7 SM Date Sampled 5 / 20 / 10 Time 1435 am (pm)
Describe Sampling Point _____

Well Depth 240 ft below MP Depth to Water (below MP) 56.13 ft Casing Diameter 5 in
Date 5 / 20 / 10 Time _____ am pm Casing Volume 183 gal 552

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1245	9.98	1570	11.7	12.45	103.58	197	3.9
1313	9.89	1568	11.8	9.96	103.09	306	3.9
1345	9.85	1587	11.9	5.59	105.39	431	3.9
1430	9.79	1595	12.1	3.14	105.82	607	3.9

Pumping Start Time 1203 WL 56.13 Pumping End Time 1439 WL 105.82

Comments: BEGAN PUMPING AT 6.25 GPM

1215-106.6 AND DROPPING / CUT FLOW TO 4.7 GPM : WELL SEEMS TO BE HOLDING STEADY

ORP = +152 DO 39.3% 4.09 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 DM Project STRATA / ROSS
Location _____ W.O.# _____
Sample ID# 42-190m Date Sampled 5 / 17 / 10 Time 1612 ~~5pm~~
Describe Sampling Point _____

Well Depth 600 ft below MP Depth to Water (below MP) 286.32 ft Casing Diameter 5 in
Date 5 / 17 / 10 Time 1230 am ~~pm~~ Casing Volume 323 gal 971

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at DEDICATED ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1335	12.15	1776	13.9	11.09	7500 ^{62.38}	213	4.2/2.9 ¹⁰³⁵⁰
1439	12.01	1656	19.0	16.02	7500 ^{35.84}	~250	0.56 gpm
1612	11.49	1525	21.7	31.20	7500 ^{33.00}		0.56 gpm

Pumping Start Time 1235 WL 286.32 Pumping End Time 1625 WL 29.80

Comments: BEGAN PUMPING @ 4.2 GPM

WELL PUMPED DRY AT 1519 - 29.80 DEPTH.

LET WELL RECOVER TO 33.00 & SAMPLED 29.80 AFTER SAMPLING
ORP = +21

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 02 Project STRATA / ROSS
 Location _____ W.O.# _____
 Sample ID# 42-19 02 Date Sampled 5 / 17 / 10 Time 1845 am pm
 Describe Sampling Point _____

Well Depth 550 ft below MP Depth to Water (below MP) 303.94 ft Casing Diameter 5 in
 Date 5 / 17 / 10 Time _____ am pm Casing Volume 246 gal 738

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1727	9.25	1653	11.7	4.06	36.84	190	10 GPM
1754	9.13	1849	11.9	3.33	29.65	433	9 GPM
1818	9.12	1885	11.9	2.12	29.64	649	9 GPM
1845	9.14	1876	12.1	2.43	29.70	892	9 GPM

Pumping Start Time 1712 WL 155.40 Pumping End Time 1850 WL _____

Comments: BEGAN PUMPING AT 15 GPM

DO = ~~70.0~~ 70.0 % / 6.65 mg/L
ORP = +112

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 SM Project STRATA ROSS
Location 44.56450/-104.94815 W.O.# 09142
Sample ID# 42-19 SM Date Sampled 5/18/10 Time 1540 am ☒ pm
Describe Sampling Point _____

Well Depth 285 ft below MP Depth to Water (below MP) 155.57 ft Casing Diameter 5 in
Date 5/18/10 Time 0800 am ☒ pm (92.74) Casing Volume 129 gal 388

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump
Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: DEDICATED). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0848	12.33	1495	12.8	6.42	30.18		3.2
1532	12.05	1418	12.1	5.01	31.92		2.9
1540	12.24	1452	12.0	5.39	29.13		2.5

Pumping Start Time 0828 WL 92.74 Pumping End Time 1545 WL 29.13

Comments: BEGAN PUMPING AT 4.6 GPM (3.2 GPM @ 0848) ~ 105 GAL REMOVED
WELL PUMPED DRY AT 0855 - DPTH = 29.24

AT 0946 WELL DPTH WAS STILL AT 29.17 - RECOVERING SLOWLY - WILL SAMPLE LATER IN DAY.
RETURNED AT 1520 WATER LEVEL AT 56.11 ORP = +34 DO = 18.2% 1.78 mg/L

Form completed by: J. ROGERS Witnessed by: _____

WELL WENT DRY AGAIN AT 29.13

SAMPLING INFORMATION

Sampling Point SA 43-18-1 Project STRATA / ROS S
 Location 44.57625 / -104.94811 W.O.# 2009142
 Sample ID# SA 43-18-1 Date Sampled 6 / 18 / 10 Time 1225 am ☒ pm
 Describe Sampling Point _____

Well Depth 30 ft below MP Depth to Water (below MP) 20.88 ft Casing Diameter 2 in
 Date 6 / 18 / 10 Time 1140 ☒ am pm Casing Volume 1.5 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder pump / low flow

Tap

☒ Bailer

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (☒ yes or no)

and all field measurements (☒ yes or no). Tubing used only for N/A

Static Water Levels of Associated Wells

SA 13-17-1 = DRY

SA 43-18-2 = 10.22

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1150	7.90	7560	10.5	560	22.87	1.5	-
1200	7.91	7520	10.0	856	24.07	3.0	-
1210	7.96	7490	9.9	881	25.35	4.5	-

Pumping Start Time 1140 WL 20.88 Pumping End Time 1225 WL 27.05

Comments: _____

Form completed by:

J. Rogers

LAB COC #: _____

SAMPLING INFORMATION

Sampling Point SA43-18-3 Project ROSS ISR
Location _____ W.O.# _____
Sample ID# SA43-18-3 Date Sampled 6 15 10 Time 17:30 am pm
Describe Sampling Point 2" Monitor Well

Well Depth ~28 ft below MP Depth to Water (below MP) 13.03 ft Casing Diameter 2 in
Date 6 15 10 Time 17:00 am pm Casing Volume ~2 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____

' Tap

Bailer

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm

x 0.00223

cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU) ^{ORP}	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
17:15	8.08	852.	9.0	>1000 ⁺³⁴	—	4	—
17:25	8.18	860	9.0	>1000 ⁺⁵⁸	—	6	—
17:30	8.16	867	9.0	>1000 ⁺⁸³	—	8	—

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: * Batteries 2 gals → WL = 13.65' → V. TURBID -

* took 30 min to remove SURFACTANT WATER FOR AN BOTTLES

- 4 1 Gallon Due to TURBIDITY

Form completed by: Ben Schiffer

Witnessed by: _____



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006342001

Project: ROSS ISR
Lab ID: S1006342-001
Client Sample ID: 12-18DM
COC: 131150

Work Order: S1006342
Collection Date: 6/18/2010 2:00:00 PM
Date Received: 6/21/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.23			s.u.	06/18/2010 1400	Field
Conductivity	3080			µmhos/cm	06/18/2010 1400	Field
Dissolved Oxygen	1.14			mg/L	06/18/2010 1400	Field
Dissolved Oxygen (pct)	10.9			%	06/18/2010 1400	Field
Redox Potential	-221			mV	06/18/2010 1400	Field
Turbidity	6.54			NTU	06/18/2010 1400	Field
Temperature	12.4			°C	06/18/2010 1400	Field
General Parameters						
pH	11.2	0.1		s.u.	06/21/2010 1450 KO	SM 4500 H B
Electrical Conductivity	2290	5		µmhos/cm	06/21/2010 1450 KO	SM 2510B
Total Dissolved Solids (180)	1190	10		mg/L	06/21/2010 1410 MJH	SM 2540
Solids, Total Dissolved (Calc)	1090	10		mg/L	06/24/2010 923 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	415	5		mg/L	06/21/2010 1450 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.4	0.1		mg/L	07/01/2010 1751 AS	EPA 350.1
Gross Alpha	3.2 ± 2.0	3.1		pCi/L	07/10/2010 1009 SH	SM 7110B
Gross Beta	18.8 ± 4.3	7		pCi/L	07/10/2010 1009 SH	SM 7110B
Radium 226 (Dissolved)	0.22 ± 0.08	0.2		pCi/L	07/15/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/21/2010 1525 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/19/2010 2107 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	07/14/2010 2139 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	07/12/2010 1808 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/09/2010 2147 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	07/07/2010 1943 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	06/25/2010 1135 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	06/21/2010 1450 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	200	5		mg/L	06/21/2010 1450 KO	SM 2320B
Chloride	362	1		mg/L	06/21/2010 1914 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	06/21/2010 1450 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/29/2010 1708 AS	EPA 353.2
Sulfate	37	1		mg/L	06/21/2010 1914 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006342001

Project: ROSS ISR
Lab ID: S1006342-001
Client Sample ID: 12-18DM
COC: 131150

Work Order: S1006342
Collection Date: 6/18/2010 2:00:00 PM
Date Received: 6/21/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	3	1		mg/L	06/21/2010 1454 DG	EPA 200.7
Magnesium	ND	1		mg/L	06/21/2010 1454 DG	EPA 200.7
Potassium	31	1		mg/L	06/21/2010 1454 DG	EPA 200.7
Sodium	405	1		mg/L	06/21/2010 1454 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Carbonate as CO ₃	6.65	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Chloride	10.20	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Sulfate	0.77	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Calcium	0.12	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Magnesium	ND	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Potassium	0.78	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Sodium	17.60	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.51	0		meq/L	06/24/2010 923 KO	SM 1030E
Anion Sum	19.32	0		meq/L	06/24/2010 923 KO	SM 1030E
Cation-Anion Balance	2.14	0		%	06/24/2010 923 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

Page 2 of 6



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006342001

Project: ROSS ISR
Lab ID: S1006342-001
Client Sample ID: 12-18DM
COC: 131150

Work Order: S1006342
Collection Date: 6/18/2010 2:00:00 PM
Date Received: 6/21/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.5	0.1		mg/L	06/21/2010 1454 DG	EPA 200.7
Arsenic	0.008	0.005		mg/L	06/21/2010 1257 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/21/2010 1257 MS	EPA 200.8
Boron	0.5	0.1		mg/L	06/21/2010 1454 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/21/2010 1257 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/21/2010 1454 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/21/2010 1257 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/21/2010 1454 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/21/2010 1257 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/24/2010 810 BK	EPA 245.1
Molybdenum	0.04	0.02		mg/L	06/21/2010 1257 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/21/2010 1454 DG	EPA 200.7
Selenium	0.017	0.005		mg/L	06/21/2010 1257 MS	EPA 200.8
Uranium	ND	0.001		mg/L	06/21/2010 1257 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/21/2010 1257 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/21/2010 1454 DG	EPA 200.7
Total Metals						
Iron	0.06	0.05		mg/L	06/22/2010 1546 DG	EPA 200.7
Manganese	ND	0.02		mg/L	06/22/2010 1546 DG	EPA 200.7

These results apply only to the samples tested.

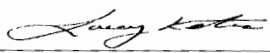
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:


Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006339001

Project: ROSS ISR
Lab ID: S1006339-001
Client Sample ID: 12-18OZ
COC: 128481

Work Order: S1006339
Collection Date: 6/18/2010 11:00:00 AM
Date Received: 6/18/2010 3:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.02			s.u.	06/18/2010 1100	Field
Conductivity	1654			µmhos/cm	06/18/2010 1100	Field
Dissolved Oxygen	1.83			mg/L	06/18/2010 1100	Field
Dissolved Oxygen (pct)	18.3			%	06/18/2010 1100	Field
Redox Potential	95			mV	06/18/2010 1100	Field
Turbidity	0.97			NTU	06/18/2010 1100	Field
Temperature	12.4			°C	06/18/2010 1100	Field
General Parameters						
pH	8.6	0.1		s.u.	06/21/2010 1408 KO	SM 4500 H B
Electrical Conductivity	1640	5		µmhos/cm	06/21/2010 1408 KO	SM 2510B
Total Dissolved Solids (180)	1140	10		mg/L	06/21/2010 1355 MJH	SM 2540
Solids, Total Dissolved (Calc)	1050	10		mg/L	06/24/2010 920 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	541	5		mg/L	06/21/2010 1408 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	07/01/2010 1748 AS	EPA 350.1
Gross Alpha	157.5 ± 9.0	2		pCi/L	06/29/2010 000 SH	SM 7110B
Gross Beta	24.1 ± 4.3	3.8		pCi/L	06/29/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	5.00 ± 0.35	0.2		pCi/L	07/15/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/21/2010 1226 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/19/2010 2107 SH	Ra-05
Lead 210 Dissolved	4.83 ± 0.85	1		pCi/L	07/15/2010 2257 SH	OTW01
Lead 210 Suspended	1.70 ± 0.56	1		pCi/L	07/12/2010 1556 SH	OTW01
Polonium 210 Dissolved	22.9 ± 1.9	1		pCi/L	07/09/2010 1913 SH	OTW01
Polonium 210 Suspended	35.0 ± 2.1	1		pCi/L	07/07/2010 1737 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	06/25/2010 1110 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	624	5		mg/L	06/21/2010 1408 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	18	5		mg/L	06/21/2010 1408 KO	SM 2320B
Chloride	4	1		mg/L	06/21/2010 1735 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	06/21/2010 1408 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/29/2010 1658 AS	EPA 353.2
Sulfate	295	1		mg/L	06/21/2010 1735 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron

Lacey Ketron, Project Manager

Page 1 of 3



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006339001

Project: ROSS ISR
Lab ID: S1006339-001
Client Sample ID: 12-18OZ
COC: 128481

Work Order: S1006339
Collection Date: 6/18/2010 11:00:00 AM
Date Received: 6/18/2010 3:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	4	1		mg/L	06/21/2010 1447 DG	EPA 200.7
Magnesium	1	1		mg/L	06/21/2010 1447 DG	EPA 200.7
Potassium	4	1		mg/L	06/21/2010 1447 DG	EPA 200.7
Sodium	416	1		mg/L	06/21/2010 1447 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.22	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Carbonate as CO ₃	0.60	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Chloride	0.10	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Sulfate	6.14	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Calcium	0.21	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Magnesium	0.11	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Potassium	0.10	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Sodium	18.07	0.01		meq/L	06/24/2010 920 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.50	0		meq/L	06/24/2010 920 KO	SM 1030E
Anion Sum	17.14	0		meq/L	06/24/2010 920 KO	SM 1030E
Cation-Anion Balance	3.82	0		%	06/24/2010 920 KO	SM 1030E

These results apply only to the samples tested.

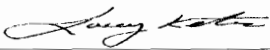
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:


Lacey Ketron, Project Manager

Page 2 of 3



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006339001

Project: ROSS ISR
Lab ID: S1006339-001
Client Sample ID: 12-18OZ
COC: 128481

Work Order: S1006339
Collection Date: 6/18/2010 11:00:00 AM
Date Received: 6/18/2010 3:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/21/2010 1447 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	06/18/2010 1846 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/18/2010 1846 MS	EPA 200.8
Boron	0.6	0.1		mg/L	06/21/2010 1447 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/18/2010 1846 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/21/2010 1447 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/18/2010 1846 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/21/2010 1447 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/18/2010 1846 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/24/2010 805 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/18/2010 1846 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/21/2010 1447 DG	EPA 200.7
Selenium	ND	0.005		mg/L	06/18/2010 1846 MS	EPA 200.8
Uranium	0.033	0.001		mg/L	06/18/2010 1846 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/18/2010 1846 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/21/2010 1447 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	06/21/2010 1752 DG	EPA 200.7
Manganese	ND	0.02		mg/L	06/21/2010 1752 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-002
Client Sample ID: 12-18SA
COC: 130606

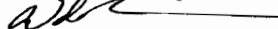
Work Order: S1006135
Collection Date: 6/5/2010 1:00:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.30	s.u.			06/05/2010 1300	Field
Conductivity	945	µm		hos/cm	06/05/2010 1300	Field
Redox Potential	-118	mV			06/05/2010 1300	Field
Turbidity	74.9	NT		U	06/05/2010 1300	Field
Temperature	13.9	°C			06/05/2010 1300	Field
Static Water Level	48.03	ft			06/05/2010 1300	Field
General Parameters						
pH	8.4	0.1		s.u.	06/08/2010 2204 KO	SM 4500 H B
Electrical Conductivity	829	5		µmhos/cm	06/09/2010 1038 KO	SM 2510B
Total Dissolved Solids (180)	550	10		mg/L	06/08/2010 1235 MJH	SM 2540
Solids, Total Dissolved (Calc)	520	10		mg/L	06/14/2010 1449 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	303	5		mg/L	06/08/2010 2204 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	06/21/2010 1153 AS	EPA 350.1
Gross Alpha	2.7 ± 1.5	2		pCi/L	06/30/2010 125 SH	SM 7110B
Gross Beta	13.0 ± 2.7	3		pCi/L	06/30/2010 125 SH	SM 7110B
Radium 226 (Dissolved)	0.24 ± 0.07	0.2		pCi/L	06/28/2010 1555 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.24 ± 0.06	0.2		pCi/L	07/02/2010 1301 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	06/29/2010 305 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	06/29/2010 1709 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	07/12/2010 1808 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/01/2010 2033 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/23/2010 2215 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	06/28/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/28/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	06/11/2010 1023 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	352	5		mg/L	06/08/2010 2204 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	8	5		mg/L	06/08/2010 2204 KO	SM 2320B
Chloride	12	1		mg/L	06/09/2010 048 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	06/08/2010 2204 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/17/2010 1710 AS	EPA 353.2
Sulfate	142	1		mg/L	06/09/2010 048 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-002
Client Sample ID: 12-18SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 1:00:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	43	1		mg/L	06/08/2010 1234 RS	EPA 200.7
Magnesium	31	1		mg/L	06/08/2010 1234 RS	EPA 200.7
Potassium	16	1		mg/L	06/08/2010 1234 RS	EPA 200.7
Sodium	97	1		mg/L	06/08/2010 1234 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.77	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Carbonate as CO ₃	0.27	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Chloride	0.33	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Fluoride	ND	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sulfate	2.94	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Calcium	2.14	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Magnesium	2.56	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Potassium	0.40	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sodium	4.21	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	9.31	0		meq/L	06/14/2010 1449 KO	SM 1030E
Anion Sum	9.33	0		meq/L	06/14/2010 1449 KO	SM 1030E
Cation-Anion Balance	0.10	0		%	06/14/2010 1449 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-002
Client Sample ID: 12-18SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 1:00:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/08/2010 1234 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	06/08/2010 1141 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/08/2010 1141 MS	EPA 200.8
Boron	ND	0.1		mg/L	06/08/2010 1234 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	06/08/2010 1141 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/08/2010 1234 RS	EPA 200.7
Copper	ND	0.01		mg/L	06/08/2010 1141 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/08/2010 1234 RS	EPA 200.7
Lead	ND	0.02		mg/L	06/08/2010 1141 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/10/2010 1153 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/08/2010 1141 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/08/2010 1234 RS	EPA 200.7
Selenium	ND	0.005		mg/L	06/08/2010 1141 MS	EPA 200.8
Uranium	ND	0.001		mg/L	06/08/2010 1141 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/08/2010 1141 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/08/2010 1234 RS	EPA 200.7
Total Metals						
Iron	0.34	0.05		mg/L	06/08/2010 1339 RS	EPA 200.7
Manganese	0.06	0.02		mg/L	06/08/2010 1339 RS	EPA 200.7

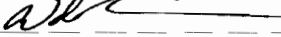
These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006342001

Project: ROSS ISR
Lab ID: S1006342-002
Client Sample ID: 12-18SM
COC: 131150

Work Order: S1006342
Collection Date: 6/18/2010 2:45:00 PM
Date Received: 6/21/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.22			s.u.	06/18/2010 1445	Field
Conductivity	1436			µmhos/cm	06/18/2010 1445	Field
Dissolved Oxygen	0.75			mg/L	06/18/2010 1445	Field
Dissolved Oxygen (pct)	16.9			%	06/18/2010 1445	Field
Redox Potential	-190			mV	06/18/2010 1445	Field
Turbidity	0.54			NTU	06/18/2010 1445	Field
Temperature	11.8			°C	06/18/2010 1445	Field
General Parameters						
pH	8.8	0.1		s.u.	06/21/2010 1500 KO	SM 4500 H B
Electrical Conductivity	1440	5		µmhos/cm	06/21/2010 1500 KO	SM 2510B
Total Dissolved Solids (180)	980	10		mg/L	06/21/2010 1420 MJH	SM 2540
Solids, Total Dissolved (Calc)	880	10		mg/L	06/24/2010 923 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	528	5		mg/L	06/21/2010 1500 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/01/2010 1752 AS	EPA 350.1
Gross Alpha	2.1 ± 1.9	3.1		pCi/L	07/10/2010 1009 SH	SM 7110B
Gross Beta	ND	6.8		pCi/L	07/10/2010 1009 SH	SM 7110B
Radium 226 (Dissolved)	0.24 ± 0.08	0.2		pCi/L	07/15/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/21/2010 1525 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/20/2010 120 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	07/14/2010 2139 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	07/12/2010 1808 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/09/2010 2147 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	07/07/2010 1943 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	06/25/2010 1139 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	578	5		mg/L	06/21/2010 1500 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	33	5		mg/L	06/21/2010 1500 KO	SM 2320B
Chloride	3	1		mg/L	06/21/2010 1924 KO	EPA 300.0
Fluoride	1.7	0.1		mg/L	06/21/2010 1500 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/29/2010 1709 AS	EPA 353.2
Sulfate	218	1		mg/L	06/21/2010 1924 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006342001

Project: ROSS ISR
Lab ID: S1006342-002
Client Sample ID: 12-18SM
COC: 131150

Work Order: S1006342
Collection Date: 6/18/2010 2:45:00 PM
Date Received: 6/21/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	3	1		mg/L	06/21/2010 1456 DG	EPA 200.7
Magnesium	1	1		mg/L	06/21/2010 1456 DG	EPA 200.7
Potassium	5	1		mg/L	06/21/2010 1456 DG	EPA 200.7
Sodium	328	1		mg/L	06/21/2010 1456 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.47	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Carbonate as CO ₃	1.08	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Chloride	0.09	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Fluoride	0.09	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Sulfate	4.54	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Calcium	0.16	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Magnesium	0.11	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Potassium	0.13	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Sodium	14.26	0.01		meq/L	06/24/2010 923 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	14.67	0		meq/L	06/24/2010 923 KO	SM 1030E
Anion Sum	15.29	0		meq/L	06/24/2010 923 KO	SM 1030E
Cation-Anion Balance	2.07	0		%	06/24/2010 923 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:



Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006342001

Project: ROSS ISR
Lab ID: S1006342-002
Client Sample ID: 12-18SM
COC: 131150

Work Order: S1006342
Collection Date: 6/18/2010 2:45:00 PM
Date Received: 6/21/2010 8:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/21/2010 1456 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	06/21/2010 1300 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/21/2010 1300 MS	EPA 200.8
Boron	0.5	0.1		mg/L	06/21/2010 1456 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/21/2010 1300 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/21/2010 1456 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/21/2010 1300 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/21/2010 1456 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/21/2010 1300 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/24/2010 811 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/21/2010 1300 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/21/2010 1456 DG	EPA 200.7
Selenium	ND	0.005		mg/L	06/21/2010 1300 MS	EPA 200.8
Uranium	ND	0.001		mg/L	06/21/2010 1300 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/21/2010 1300 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/21/2010 1456 DG	EPA 200.7
Total Metals						
Iron	0.06	0.05		mg/L	06/22/2010 1550 DG	EPA 200.7
Manganese	ND	0.02		mg/L	06/22/2010 1550 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager

Page 6 of 6



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-002
Client Sample ID: 14-18DM
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 4:30:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.06			s.u.	06/16/2010 1630	Field
Conductivity	2860			µmhos/cm	06/16/2010 1630	Field
Dissolved Oxygen	1.97			mg/L	06/16/2010 1630	Field
Dissolved Oxygen (pct)	18.6			%	06/16/2010 1630	Field
Turbidity	31.2			NTU	06/16/2010 1630	Field
Temperature	12.1			°C	06/16/2010 1630	Field
General Parameters						
pH	9.5	0.1		s.u.	06/18/2010 1612 KO	SM 4500 H B
Electrical Conductivity	2170	5		µmhos/cm	06/18/2010 1612 KO	SM 2510B
Total Dissolved Solids (180)	1260	10		mg/L	06/17/2010 1640 MJH	SM 2540
Solids, Total Dissolved (Calc)	1120	10		mg/L	06/22/2010 1213 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	422	5		mg/L	06/18/2010 1612 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	07/01/2010 1650 AS	EPA 350.1
Gross Alpha	2.1 ± 2.0	2		pCi/L	06/29/2010 000 SH	SM 7110B
Gross Beta	17.2 ± 4.3	4.10		pCi/L	06/29/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	0.21 ± 0.06	0.2		pCi/L	06/28/2010 1813 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/21/2010 1226 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/02/2010 2227 SH	Ra-05
Lead 210 Dissolved	1.10 ± 0.99	1		pCi/L	07/07/2010 1243 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/30/2010 000 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/06/2010 1538 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	07/09/2010 1437 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	0.001	0.001		mg/L	06/21/2010 1410 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	337	5		mg/L	06/18/2010 1612 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	87	5		mg/L	06/18/2010 1612 KO	SM 2320B
Chloride	392	1		mg/L	06/18/2010 000 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	06/18/2010 1612 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/28/2010 1521 AS	EPA 353.2
Sulfate	4	1		mg/L	06/17/2010 2310 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

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- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron

Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010

Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-002
Client Sample ID: 14-18DM
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 4:30:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	06/17/2010 1931 RS	EPA 200.7
Magnesium	ND	1		mg/L	06/17/2010 1931 RS	EPA 200.7
Potassium	22	1		mg/L	06/17/2010 1931 RS	EPA 200.7
Sodium	447	1		mg/L	06/17/2010 1931 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.52	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Carbonate as CO ₃	2.91	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Chloride	11.06	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Sulfate	0.08	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Calcium	0.12	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Magnesium	ND	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Potassium	0.56	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Sodium	19.45	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.14	0		meq/L	06/22/2010 1213 KO	SM 1030E
Anion Sum	19.65	0		meq/L	06/22/2010 1213 KO	SM 1030E
Cation-Anion Balance	1.22	0		%	06/22/2010 1213 KO	SM 1030E

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- S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-002
Client Sample ID: 14-18DM
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 4:30:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/17/2010 1931 RS	EPA 200.7
Arsenic	0.005	0.005		mg/L	06/17/2010 1417 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/17/2010 1417 MS	EPA 200.8
Boron	0.7	0.1		mg/L	06/17/2010 1931 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	06/17/2010 1417 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/17/2010 1931 RS	EPA 200.7
Copper	ND	0.01		mg/L	06/17/2010 1417 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/17/2010 1931 RS	EPA 200.7
Lead	ND	0.02		mg/L	06/17/2010 1417 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/22/2010 1321 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/17/2010 1417 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/17/2010 1931 RS	EPA 200.7
Selenium	0.012	0.005		mg/L	06/17/2010 1417 MS	EPA 200.8
Uranium	ND	0.001		mg/L	06/17/2010 1417 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/17/2010 1417 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	06/17/2010 1931 RS	EPA 200.7
Total Metals						
Iron	0.72	0.05		mg/L	06/18/2010 1851 RS	EPA 200.7
Manganese	ND	0.02		mg/L	06/18/2010 1851 RS	EPA 200.7

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- S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-001
Client Sample ID: 14-18OZ
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 1:30:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.07			s.u.	06/16/2010 1330	Field
Conductivity	3660			µmhos/cm	06/16/2010 1330	Field
Dissolved Oxygen	1.44			mg/L	06/16/2010 1330	Field
Dissolved Oxygen (pct)	13.9			%	06/16/2010 1330	Field
Turbidity	25.0			NTU	06/16/2010 1330	Field
Temperature	14.0			°C	06/16/2010 1330	Field
General Parameters						
pH	8.6	0.1		s.u.	06/18/2010 1602 KO	SM 4500 H B
Electrical Conductivity	2810	5		µmhos/cm	06/18/2010 1602 KO	SM 2510B
Total Dissolved Solids (180)	2070	10		mg/L	06/17/2010 1635 MJH	SM 2540
Solids, Total Dissolved (Calc)	1820	10		mg/L	06/22/2010 1213 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	493	5		mg/L	06/18/2010 1602 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	07/01/2010 1649 AS	EPA 350.1
Gross Alpha	191 ± 11	2		pCi/L	06/29/2010 000 SH	SM 7110B
Gross Beta	37.6 ± 5.7	5.10		pCi/L	06/29/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	3.74 ± 0.25	0.2		pCi/L	06/28/2010 1813 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.28 ± 0.07	0.2		pCi/L	07/21/2010 1226 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/02/2010 2227 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	07/07/2010 1243 SH	OTW01
Lead 210 Suspended	1.18 ± 0.68	1		pCi/L	06/30/2010 000 SH	OTW01
Polonium 210 Dissolved	1.79 ± 0.28	1		pCi/L	07/06/2010 1538 SH	OTW01
Polonium 210 Suspended	1.05 ± 0.27	1		pCi/L	07/09/2010 1437 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	06/21/2010 1329 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	556	5		mg/L	06/18/2010 1602 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	23	5		mg/L	06/18/2010 1602 KO	SM 2320B
Chloride	10	1		mg/L	06/18/2010 000 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	06/18/2010 1602 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/28/2010 1520 AS	EPA 353.2
Sulfate	859	1		mg/L	06/18/2010 000 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-001
Client Sample ID: 14-18OZ
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 1:30:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	7	1		mg/L	06/17/2010 1924 RS	EPA 200.7
Magnesium	3	1		mg/L	06/17/2010 1924 RS	EPA 200.7
Potassium	11	1		mg/L	06/17/2010 1924 RS	EPA 200.7
Sodium	639	1		mg/L	06/17/2010 1924 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.10	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Carbonate as CO ₃	0.75	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Chloride	0.28	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Sulfate	17.89	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Calcium	0.35	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Magnesium	0.21	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Potassium	0.27	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Sodium	27.79	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	28.63	0		meq/L	06/22/2010 1213 KO	SM 1030E
Anion Sum	28.05	0		meq/L	06/22/2010 1213 KO	SM 1030E
Cation-Anion Balance	1.02	0		%	06/22/2010 1213 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:



Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-001
Client Sample ID: 14-18OZ
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 1:30:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/17/2010 1924 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	06/17/2010 1406 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/17/2010 1406 MS	EPA 200.8
Boron	0.4	0.1		mg/L	06/17/2010 1924 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	06/17/2010 1406 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/17/2010 1924 RS	EPA 200.7
Copper	ND	0.01		mg/L	06/17/2010 1406 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/17/2010 1924 RS	EPA 200.7
Lead	ND	0.02		mg/L	06/17/2010 1406 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/22/2010 1318 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/17/2010 1406 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/17/2010 1924 RS	EPA 200.7
Selenium	ND	0.005		mg/L	06/17/2010 1406 MS	EPA 200.8
Uranium	0.109	0.001		mg/L	06/17/2010 1406 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/17/2010 1406 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/17/2010 1924 RS	EPA 200.7
Total Metals						
Iron	0.33	0.05		mg/L	06/18/2010 1837 RS	EPA 200.7
Manganese	ND	0.02		mg/L	06/18/2010 1837 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-003
Client Sample ID: 14-18SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 3:30:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.81	s.u.			06/05/2010 1530	Field
Conductivity	1909	µm		hos/cm	06/05/2010 1530	Field
Redox Potential	-103	mV			06/05/2010 1530	Field
Turbidity	0.61	NT		U	06/05/2010 1530	Field
Temperature	12.4	°C			06/05/2010 1530	Field
Static Water Level	22.78	ft			06/05/2010 1530	Field
General Parameters						
pH	8.6	0.1		s.u.	06/08/2010 2215 KO	SM 4500 H B
Electrical Conductivity	1750	5		µmhos/cm	06/09/2010 1040 KO	SM 2510B
Total Dissolved Solids (180)	1230	10		mg/L	06/08/2010 1245 MJH	SM 2540
Solids, Total Dissolved (Calc)	1110	10		mg/L	06/14/2010 1449 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	471	5		mg/L	06/08/2010 2215 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	06/21/2010 1154 AS	EPA 350.1
Gross Alpha	7.4 ± 2.5	2		pCi/L	06/29/2010 000 SH	SM 7110B
Gross Beta	5.9 ± 4.0	3.9		pCi/L	06/29/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	0.27 ± 0.07	0.2		pCi/L	06/28/2010 1555 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/02/2010 1528 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	06/29/2010 305 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	06/29/2010 1709 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	07/12/2010 1808 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/01/2010 2033 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/23/2010 2215 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	06/28/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/28/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	06/11/2010 1026 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	526	5		mg/L	06/08/2010 2215 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	24	5		mg/L	06/08/2010 2215 KO	SM 2320B
Chloride	86	1		mg/L	06/09/2010 104 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	06/08/2010 2215 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/17/2010 1711 AS	EPA 353.2
Sulfate	343	1		mg/L	06/09/2010 104 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-003
Client Sample ID: 14-18SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 3:30:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	17	1		mg/L	06/08/2010 1236 RS	EPA 200.7
Magnesium	9	1		mg/L	06/08/2010 1236 RS	EPA 200.7
Potassium	11	1		mg/L	06/08/2010 1236 RS	EPA 200.7
Sodium	361	1		mg/L	06/08/2010 1236 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.62	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Carbonate as CO ₃	0.79	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Chloride	2.43	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sulfate	7.14	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Calcium	0.84	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Magnesium	0.74	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Potassium	0.27	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sodium	15.70	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.57	0		meq/L	06/14/2010 1449 KO	SM 1030E
Anion Sum	19.01	0		meq/L	06/14/2010 1449 KO	SM 1030E
Cation-Anion Balance	3.93	0		%	06/14/2010 1449 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-003
Client Sample ID: 14-18SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 3:30:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/08/2010 1236 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	06/08/2010 1144 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/08/2010 1144 MS	EPA 200.8
Boron	0.2	0.1		mg/L	06/08/2010 1236 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	06/08/2010 1144 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/08/2010 1236 RS	EPA 200.7
Copper	ND	0.01		mg/L	06/08/2010 1144 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/08/2010 1236 RS	EPA 200.7
Lead	ND	0.02		mg/L	06/08/2010 1144 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/10/2010 1158 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/08/2010 1144 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/08/2010 1236 RS	EPA 200.7
Selenium	ND	0.005		mg/L	06/08/2010 1144 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	06/08/2010 1144 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/08/2010 1144 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/08/2010 1236 RS	EPA 200.7
Total Metals						
Iron	0.14	0.05		mg/L	06/08/2010 1342 RS	EPA 200.7
Manganese	0.04	0.02		mg/L	06/08/2010 1342 RS	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-003
Client Sample ID: 14-18SM
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 4:45:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.64			s.u.	06/16/2010 1645	Field
Conductivity	1548			µmhos/cm	06/16/2010 1645	Field
Dissolved Oxygen	1.04			mg/L	06/16/2010 1645	Field
Dissolved Oxygen (pct)	10.2			%	06/16/2010 1645	Field
Turbidity	0.60			NTU	06/16/2010 1645	Field
Temperature	11.2			°C	06/16/2010 1645	Field
General Parameters						
pH	9.1	0.1		s.u.	06/18/2010 1622 KO	SM 4500 H B
Electrical Conductivity	1520	5		µmhos/cm	06/18/2010 1622 KO	SM 2510B
Total Dissolved Solids (180)	1040	10		mg/L	06/17/2010 1645 MJH	SM 2540
Solids, Total Dissolved (Calc)	940	10		mg/L	06/22/2010 1213 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	556	5		mg/L	06/18/2010 1622 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/01/2010 1657 AS	EPA 350.1
Gross Alpha	3.1 ± 2.0	2		pCi/L	06/29/2010 000 SH	SM 7110B
Gross Beta	7.0 ± 4.1	4.10		pCi/L	06/29/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	07/02/2010 1528 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/21/2010 1226 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.29 ± 0.72	1		pCi/L	07/03/2010 236 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	07/07/2010 1243 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/30/2010 000 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/06/2010 1538 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	07/09/2010 1437 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	06/21/2010 1406 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	566	5		mg/L	06/18/2010 1622 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	55	5		mg/L	06/18/2010 1622 KO	SM 2320B
Chloride	3	1		mg/L	06/17/2010 2326 KO	EPA 300.0
Fluoride	1.5	0.1		mg/L	06/18/2010 1622 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/28/2010 1522 AS	EPA 353.2
Sulfate	241	1		mg/L	06/17/2010 2326 KO	EPA 300.0

These results apply only to the samples tested.

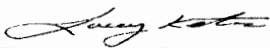
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:


Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-003
Client Sample ID: 14-18SM
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 4:45:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	06/17/2010 1933 RS	EPA 200.7
Magnesium	ND	1		mg/L	06/17/2010 1933 RS	EPA 200.7
Potassium	8	1		mg/L	06/17/2010 1933 RS	EPA 200.7
Sodium	352	1		mg/L	06/17/2010 1933 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.28	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Carbonate as CO ₃	1.83	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Chloride	0.07	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Sulfate	5.02	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Calcium	0.10	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Magnesium	ND	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Potassium	0.20	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Sodium	15.30	0.01		meq/L	06/22/2010 1213 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.60	0		meq/L	06/22/2010 1213 KO	SM 1030E
Anion Sum	16.29	0		meq/L	06/22/2010 1213 KO	SM 1030E
Cation-Anion Balance	2.14	0		%	06/22/2010 1213 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006310002
(Replaces S1006310001)

Project: ROSS ISR
Lab ID: S1006310-003
Client Sample ID: 14-18SM
COC: 128479

Work Order: S1006310
Collection Date: 6/16/2010 4:45:00 PM
Date Received: 6/17/2010 9:12:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/17/2010 1933 RS	EPA 200.7
Arsenic	0.009	0.005		mg/L	06/17/2010 1421 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/17/2010 1421 MS	EPA 200.8
Boron	0.5	0.1		mg/L	06/17/2010 1933 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	06/17/2010 1421 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/17/2010 1933 RS	EPA 200.7
Copper	ND	0.01		mg/L	06/17/2010 1421 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/17/2010 1933 RS	EPA 200.7
Lead	ND	0.02		mg/L	06/17/2010 1421 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/22/2010 1323 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/17/2010 1421 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/17/2010 1933 RS	EPA 200.7
Selenium	ND	0.005		mg/L	06/17/2010 1421 MS	EPA 200.8
Uranium	ND	0.001		mg/L	06/17/2010 1421 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/17/2010 1421 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/17/2010 1933 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	06/18/2010 1853 RS	EPA 200.7
Manganese	ND	0.02		mg/L	06/18/2010 1853 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-002
Client Sample ID: 21-19 DM
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 3:20:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.01	s.u.			05/19/2010 1520	Field
Conductivity	1874	µm		hos/cm	05/19/2010 1520	Field
Dissolved Oxygen	4.26	mg		/L	05/19/2010 1520	Field
Dissolved Oxygen (pct)	42.6			%	05/19/2010 1520	Field
Redox Potential	+83	mV			05/19/2010 1520	Field
Turbidity	35.4	NT		U	05/19/2010 1520	Field
Temperature	14.0	°C			05/19/2010 1520	Field
General Parameters						
pH	9.4	0.1		s.u.	05/21/2010 1940 KO	SM 4500 H B
Electrical Conductivity	2150	5		µmhos/cm	05/21/2010 1940 KO	SM 2510B
Total Dissolved Solids (180)	1250	10		mg/L	05/21/2010 1435 MJH	SM 2540
Solids, Total Dissolved (Calc)	1330	10		mg/L	06/01/2010 1009 KO	SM 1030E
Alkalinity, Total (As CaCO3)	413	5		mg/L	05/21/2010 1940 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	06/04/2010 1459 AS	EPA 350.1
Gross Alpha	2.3 ± 2.4	2		pCi/L	06/22/2010 1245 SH	SM 7110B
Gross Beta	13.0 ± 4.2	3		pCi/L	06/22/2010 1245 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/18/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 2247 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/19/2010 029 SH	Ra-05
Lead 210	1.16 ± 0.57	1		pCi/L	06/19/2010 1549 SH	OTW01
Lead 210 Suspended	1.25 ± 0.94	1		pCi/L	06/19/2010 2012 SH	OTW01
Polonium 210	ND	1		pCi/L	06/24/2010 1734 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/25/2010 1449 SH	OTW01
Thorium 230	0.24±0.10	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Uranium Suspended	0.205	0.001		mg/L	05/26/2010 944 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO3	338	5		mg/L	05/21/2010 1940 KO	SM 2320B
Alkalinity, Carbonate as CO3	82	5		mg/L	05/21/2010 1940 KO	SM 2320B
Chloride	535	1		mg/L	05/21/2010 2245 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	05/21/2010 1940 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 948 AS	EPA 353.2
Sulfate	4	1		mg/L	05/21/2010 2245 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-002
Client Sample ID: 21-19 DM
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 3:20:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	3	1		mg/L	05/21/2010 1723 RS	EPA 200.7
Magnesium	ND	1		mg/L	05/21/2010 1723 RS	EPA 200.7
Potassium	21	1		mg/L	05/21/2010 1723 RS	EPA 200.7
Sodium	522	1		mg/L	05/21/2010 1723 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.54	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Carbonate as CO ₃	2.72	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Chloride	15.10	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sulfate	0.08	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Calcium	0.16	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Magnesium	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Potassium	0.54	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sodium	22.69	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.40	0		meq/L	06/01/2010 1009 KO	SM 1030E
Anion Sum	23.50	0		meq/L	06/01/2010 1009 KO	SM 1030E
Cation-Anion Balance	0.21	0		%	06/01/2010 1009 KO	SM 1030E

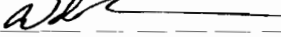
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-002
Client Sample ID: 21-19 DM
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 3:20:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	05/21/2010 1723 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/21/2010 1312 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/21/2010 1312 MS	EPA 200.8
Boron	0.8	0.1		mg/L	05/21/2010 1723 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/21/2010 1312 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/21/2010 1723 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/21/2010 1312 MS	EPA 200.8
Iron	0.10	0.05		mg/L	05/21/2010 1723 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/21/2010 1312 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1153 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/21/2010 1312 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/21/2010 1723 RS	EPA 200.7
Selenium	0.014	0.005		mg/L	05/21/2010 1312 MS	EPA 200.8
Uranium	ND	0.001		mg/L	05/21/2010 1312 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/21/2010 1312 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	05/21/2010 1723 RS	EPA 200.7
Total Metals						
Iron	0.87	0.05		mg/L	05/24/2010 1649 RS	EPA 200.7
Manganese	0.03	0.02		mg/L	05/24/2010 1649 RS	EPA 200.7

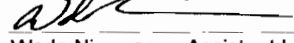
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-001
Client Sample ID: 21-19 OZ
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 12:20:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.99	s.u.			05/19/2010 1220	Field
Conductivity	2630	µm		hos/cm	05/19/2010 1220	Field
Dissolved Oxygen	2.52	mg		/L	05/19/2010 1220	Field
Dissolved Oxygen (pct)	24.7			%	05/19/2010 1220	Field
Redox Potential	+94	mV			05/19/2010 1220	Field
Turbidity	1.30	NT		U	05/19/2010 1220	Field
Temperature	12.1	°C			05/19/2010 1220	Field
General Parameters						
pH	8.6	0.1		s.u.	05/21/2010 1930 KO	SM 4500 H B
Electrical Conductivity	2370	5		µmhos/cm	05/21/2010 1930 KO	SM 2510B
Total Dissolved Solids (180)	1670	10		mg/L	05/21/2010 1430 MJH	SM 2540
Solids, Total Dissolved (Calc)	1550	10		mg/L	06/01/2010 1009 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	520	5		mg/L	05/21/2010 1930 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	06/04/2010 1458 AS	EPA 350.1
Gross Alpha	19.0 ± 3.7	2		pCi/L	06/22/2010 1245 SH	SM 7110B
Gross Beta	9.1 ± 4.0	3		pCi/L	06/22/2010 1245 SH	SM 7110B
Radium 226 (Dissolved)	0.93 ± 0.16	0.2		pCi/L	06/18/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 2247 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/19/2010 029 SH	Ra-05
Lead 210	ND	1		pCi/L	06/19/2010 1549 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/19/2010 2012 SH	OTW01
Polonium 210	ND	1		pCi/L	06/24/2010 1734 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/25/2010 1449 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Uranium Suspended	0.036	0.001		mg/L	05/26/2010 937 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	603	5		mg/L	05/21/2010 1930 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	16	5		mg/L	05/21/2010 1930 KO	SM 2320B
Chloride	9	1		mg/L	05/21/2010 2231 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	05/21/2010 1930 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 947 AS	EPA 353.2
Sulfate	678	1		mg/L	05/21/2010 2231 KO	EPA 300.0

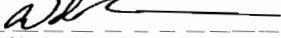
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 9



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-001
Client Sample ID: 21-19 OZ
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 12:20:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	7	1		mg/L	05/21/2010 1721 RS	EPA 200.7
Magnesium	2	1		mg/L	05/21/2010 1721 RS	EPA 200.7
Potassium	6	1		mg/L	05/21/2010 1721 RS	EPA 200.7
Sodium	531	1		mg/L	05/21/2010 1721 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.88	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Carbonate as CO ₃	0.52	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Chloride	0.26	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sulfate	14.11	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Calcium	0.35	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Magnesium	0.17	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Potassium	0.15	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sodium	23.08	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.76	0		meq/L	06/01/2010 1009 KO	SM 1030E
Anion Sum	24.80	0		meq/L	06/01/2010 1009 KO	SM 1030E
Cation-Anion Balance	2.14	0		%	06/01/2010 1009 KO	SM 1030E

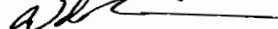
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-001
Client Sample ID: 21-19 OZ
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 12:20:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

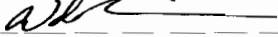
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/21/2010 1721 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/21/2010 1309 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/21/2010 1309 MS	EPA 200.8
Boron	0.4	0.1		mg/L	05/21/2010 1721 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/21/2010 1309 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/21/2010 1721 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/21/2010 1309 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/21/2010 1721 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/21/2010 1309 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1147 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/21/2010 1309 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/21/2010 1721 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/21/2010 1309 MS	EPA 200.8
Uranium	0.008	0.001		mg/L	05/21/2010 1309 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/21/2010 1309 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/21/2010 1721 RS	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	05/24/2010 1640 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/24/2010 1640 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006340001

Project: ROSS/09142
Lab ID: S1006340-001
Client Sample ID: 21-19 SA
COC: 131390

Work Order: S1006340
Collection Date: 6/18/2010 11:15:00 AM
Date Received: 6/18/2010 3:13:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.44			s.u.	06/18/2010 1115	Field
Conductivity	863			µmhos/cm	06/18/2010 1115	Field
Turbidity	99.4			NTU	06/18/2010 1115	Field
Temperature	9.3			°C	06/18/2010 1115	Field
Static Water Level	10.82			ft	06/18/2010 1115	Field
General Parameters						
pH	8.2	0.1		s.u.	06/21/2010 1418 KO	SM 4500 H B
Electrical Conductivity	937	5		µmhos/cm	06/21/2010 1418 KO	SM 2510B
Total Dissolved Solids (180)	640	10		mg/L	06/21/2010 1400 MJH	SM 2540
Solids, Total Dissolved (Calc)	570	10		mg/L	08/02/2010 1346 LJK	SM 1030E
Alkalinity, Total (As CaCO3)	374	5		mg/L	06/21/2010 1418 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/01/2010 1749 AS	EPA 350.1
Gross Alpha	6.4 ± 2.1	2		pCi/L	07/13/2010 2116 SH	SM 7110B
Gross Beta	10.0 ± 2.6	3.6		pCi/L	07/13/2010 2116 SH	SM 7110B
Radium 226 (Dissolved)	0.24 ± 0.08	0.2		pCi/L	07/15/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.24 ± 0.06	0.2		pCi/L	07/21/2010 1226 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/19/2010 2107 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	07/09/2010 000 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	07/12/2010 1556 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/09/2010 1913 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	07/07/2010 1737 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	06/25/2010 1128 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO3	456	5		mg/L	06/21/2010 1418 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	06/21/2010 1418 KO	SM 2320B
Chloride	17	1		mg/L	06/21/2010 1745 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	06/21/2010 1418 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/29/2010 1659 AS	EPA 353.2
Sulfate	107	1		mg/L	06/21/2010 1745 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

Page 1 of 6



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006340001

Project: ROSS/09142
Lab ID: S1006340-001
Client Sample ID: 21-19 SA
COC: 131390

Work Order: S1006340
Collection Date: 6/18/2010 11:15:00 AM
Date Received: 6/18/2010 3:13:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	26	1		mg/L	06/21/2010 1450 DG	EPA 200.7
Magnesium	11	1		mg/L	06/21/2010 1450 DG	EPA 200.7
Potassium	9	1		mg/L	06/21/2010 1450 DG	EPA 200.7
Sodium	171	1		mg/L	06/21/2010 1450 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.47	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Chloride	0.47	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Fluoride	0.01	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Sulfate	2.22	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Calcium	1.31	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Magnesium	0.91	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Potassium	0.22	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Sodium	7.44	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Cation / Anion Balance						
Cation Sum	9.90	0		meq/L	08/02/2010 1346 LJK	SM 1030E
Anion Sum	10.18	0		meq/L	08/02/2010 1346 LJK	SM 1030E
Cation-Anion Balance	1.43	0		%	08/02/2010 1346 LJK	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006340001

Project: ROSS/09142
Lab ID: S1006340-001
Client Sample ID: 21-19 SA
COC: 131390

Work Order: S1006340
Collection Date: 6/18/2010 11:15:00 AM
Date Received: 6/18/2010 3:13:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/21/2010 1450 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	06/18/2010 1850 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/18/2010 1850 MS	EPA 200.8
Boron	0.1	0.1		mg/L	06/21/2010 1450 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/18/2010 1850 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/21/2010 1450 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/18/2010 1850 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/21/2010 1450 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/18/2010 1850 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/24/2010 806 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/18/2010 1850 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/21/2010 1450 DG	EPA 200.7
Selenium	ND	0.005		mg/L	06/18/2010 1850 MS	EPA 200.8
Uranium	0.004	0.001		mg/L	06/18/2010 1850 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/18/2010 1850 MS	EPA 200.8
Zinc	1.32	0.01		mg/L	06/21/2010 1450 DG	EPA 200.7
Total Metals						
Iron	5.68	0.05		mg/L	06/21/2010 1754 DG	EPA 200.7
Manganese	0.36	0.02		mg/L	06/21/2010 1754 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-003
Client Sample ID: 21-19 SM
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 6:30:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.97	s.u.			05/19/2010 1830	Field
Conductivity	1719	µm		hos/cm	05/19/2010 1830	Field
Dissolved Oxygen	1.98	mg		/L	05/19/2010 1830	Field
Dissolved Oxygen (pct)	18.7			%	05/19/2010 1830	Field
Redox Potential	+36	mV			05/19/2010 1830	Field
Turbidity	0.12	NT		U	05/19/2010 1830	Field
Temperature	11.5	°C			05/19/2010 1830	Field
General Parameters						
pH	9.3	0.1		s.u.	05/21/2010 1951 KO	SM 4500 H B
Electrical Conductivity	1970	5		µmhos/cm	05/21/2010 1951 KO	SM 2510B
Total Dissolved Solids (180)	1330	10		mg/L	05/21/2010 1440 MJH	SM 2540
Solids, Total Dissolved (Calc)	1240	10		mg/L	06/01/2010 1009 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	602	5		mg/L	05/21/2010 1951 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	06/04/2010 1500 AS	EPA 350.1
Gross Alpha	5.4 ± 2.7	2		pCi/L	06/22/2010 1245 SH	SM 7110B
Gross Beta	19.0 ± 4.4	3		pCi/L	06/22/2010 1245 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/18/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 2247 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/19/2010 029 SH	Ra-05
Lead 210	ND	1		pCi/L	06/19/2010 1549 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/19/2010 2012 SH	OTW01
Polonium 210	ND	1		pCi/L	06/24/2010 1734 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/25/2010 1449 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Uranium Suspended	0.003	0.001		mg/L	05/26/2010 946 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	532	5		mg/L	05/21/2010 1951 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	99	5		mg/L	05/21/2010 1951 KO	SM 2320B
Chloride	8	1		mg/L	05/21/2010 2259 KO	EPA 300.0
Fluoride	1.0	0.1		mg/L	05/21/2010 1951 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 949 AS	EPA 353.2
Sulfate	396	1		mg/L	05/21/2010 2259 KO	EPA 300.0

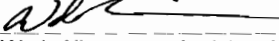
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 7 of 9



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-003
Client Sample ID: 21-19 SM
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 6:30:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	05/21/2010 1732 RS	EPA 200.7
Magnesium	ND	1		mg/L	05/21/2010 1732 RS	EPA 200.7
Potassium	31	1		mg/L	05/21/2010 1732 RS	EPA 200.7
Sodium	439	1		mg/L	05/21/2010 1732 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.72	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Carbonate as CO ₃	3.31	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Chloride	0.22	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sulfate	8.24	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Calcium	0.07	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Magnesium	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Potassium	0.78	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sodium	19.11	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.97	0		meq/L	06/01/2010 1009 KO	SM 1030E
Anion Sum	20.55	0		meq/L	06/01/2010 1009 KO	SM 1030E
Cation-Anion Balance	1.44	0		%	06/01/2010 1009 KO	SM 1030E

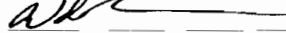
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 8 of 9



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005297001

Project: STRATA/ROSS/09142
Lab ID: S1005297-003
Client Sample ID: 21-19 SM
COC: 131377

Work Order: S1005297
Collection Date: 5/19/2010 6:30:00 PM
Date Received: 5/20/2010 8:07:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/21/2010 1732 RS	EPA 200.7
Arsenic	0.009	0.005		mg/L	05/21/2010 1323 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/21/2010 1323 MS	EPA 200.8
Boron	0.5	0.1		mg/L	05/21/2010 1732 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/21/2010 1323 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/21/2010 1732 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/21/2010 1323 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/21/2010 1732 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/21/2010 1323 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1154 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/21/2010 1323 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/21/2010 1732 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/21/2010 1323 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	05/21/2010 1323 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/21/2010 1323 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/21/2010 1732 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	05/24/2010 1651 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/24/2010 1651 RS	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-003
Client Sample ID: 34-18 DM
COC: 131376

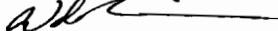
Work Order: S1005272
Collection Date: 5/18/2010 2:35:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.90	s.u.			05/18/2010 1435	Field
Conductivity	1779	µm		hos/cm	05/18/2010 1435	Field
Dissolved Oxygen	5.42	mg		/L	05/18/2010 1435	Field
Dissolved Oxygen (pct)	57.4			%	05/18/2010 1435	Field
Redox Potential	+77	mV			05/18/2010 1435	Field
Turbidity	5.29	NT		U	05/18/2010 1435	Field
Temperature	15.9	°C			05/18/2010 1435	Field
General Parameters						
pH	10.0	0.1		s.u.	05/20/2010 1905 KO	SM 4500 H B
Electrical Conductivity	2040	5		µmhos/cm	05/20/2010 1905 KO	SM 2510B
Total Dissolved Solids (180)	1160	10		mg/L	05/20/2010 1625 MJH	SM 2540
Solids, Total Dissolved (Calc)	1230	10		mg/L	05/25/2010 905 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	336	5		mg/L	05/20/2010 1905 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.9	0.1		mg/L	06/02/2010 1507 AS	EPA 350.1
Gross Alpha	ND	2		pCi/L	06/21/2010 910 SH	SM 7110B
Gross Beta	13.1 ± 3.7	3		pCi/L	06/21/2010 910 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/13/2010 1533 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 2247 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/18/2010 2000 SH	Ra-05
Lead 210	ND	1		pCi/L	06/10/2010 1437 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/10/2010 1901 SH	OTW01
Polonium 210	ND	1		pCi/L	06/08/2010 2013 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/09/2010 1821 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Uranium Suspended	0.001	0.001		mg/L	05/25/2010 1358 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	133	5		mg/L	05/20/2010 1905 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	137	5		mg/L	05/20/2010 1905 KO	SM 2320B
Chloride	523	1		mg/L	05/20/2010 2217 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	05/20/2010 1905 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	05/28/2010 1659 AS	EPA 353.2
Sulfate	12	1		mg/L	05/20/2010 2217 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010

Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-003
Client Sample ID: 34-18 DM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 2:35:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

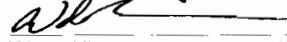
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	05/20/2010 1534 RS	EPA 200.7
Magnesium	ND	1		mg/L	05/20/2010 1534 RS	EPA 200.7
Potassium	21	1		mg/L	05/20/2010 1534 RS	EPA 200.7
Sodium	473	1		mg/L	05/24/2010 2013 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.17	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Carbonate as CO ₃	4.55	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Chloride	14.74	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sulfate	0.25	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Calcium	0.10	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Magnesium	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Potassium	0.52	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sodium	20.59	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.21	0		meq/L	05/25/2010 905 KO	SM 1030E
Anion Sum	21.77	0		meq/L	05/25/2010 905 KO	SM 1030E
Cation-Anion Balance	1.29	0		%	05/25/2010 905 KO	SM 1030E

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 8 of 15



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-003
Client Sample ID: 34-18 DM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 2:35:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/20/2010 1534 RS	EPA 200.7
Arsenic	0.007	0.005		mg/L	05/20/2010 1629 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/20/2010 1629 MS	EPA 200.8
Boron	0.5	0.1		mg/L	05/20/2010 1534 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/20/2010 1629 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/20/2010 1534 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/20/2010 1629 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/20/2010 1534 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/20/2010 1629 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1033 BK	EPA 245.1
Molybdenum	0.02	0.02		mg/L	05/20/2010 1629 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/20/2010 1534 RS	EPA 200.7
Selenium	0.009	0.005		mg/L	05/20/2010 1629 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	05/20/2010 1629 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/20/2010 1629 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	05/20/2010 1534 RS	EPA 200.7
Total Metals						
Iron	0.11	0.05		mg/L	05/21/2010 1903 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/21/2010 1903 RS	EPA 200.7

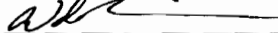
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-001
Client Sample ID: 34-180Z
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 12:00:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.18	s.u.			05/18/2010 1200	Field
Conductivity	1930	µm		hos/cm	05/18/2010 1200	Field
Dissolved Oxygen	2.47	mg		/L	05/18/2010 1200	Field
Dissolved Oxygen (pct)	23.8			%	05/18/2010 1200	Field
Redox Potential	+102	mV			05/18/2010 1200	Field
Turbidity	3.26	NT		U	05/18/2010 1200	Field
Temperature	12.7	°C			05/18/2010 1200	Field
General Parameters						
pH	8.7	0.1		s.u.	05/20/2010 1830 KO	SM 4500 H B
Electrical Conductivity	2220	5		µmhos/cm	05/20/2010 1830 KO	SM 2510B
Total Dissolved Solids (180)	1560	10		mg/L	05/20/2010 1615 MJH	SM 2540
Solids, Total Dissolved (Calc)	1470	10		mg/L	05/25/2010 905 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	485	5		mg/L	05/20/2010 1830 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	06/02/2010 1505 AS	EPA 350.1
Gross Alpha	111.1 ± 7.7	2		pCi/L	06/21/2010 910 SH	SM 7110B
Gross Beta	35.2 ± 4.4	3		pCi/L	06/21/2010 910 SH	SM 7110B
Radium 226 (Dissolved)	9.06 ± 0.53	0.2		pCi/L	06/13/2010 1533 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.49 ± 0.11	0.2		pCi/L	06/14/2010 1845 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/18/2010 2000 SH	Ra-05
Lead 210	1.88 ± 0.46	1		pCi/L	06/10/2010 1437 SH	OTW01
Lead 210 Suspended	3.88 ± 0.53	1		pCi/L	06/10/2010 1901 SH	OTW01
Polonium 210	4.77 ± 0.38	1		pCi/L	06/08/2010 2013 SH	OTW01
Polonium 210 Suspended	13.38 ± 0.63	1		pCi/L	06/09/2010 1821 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/19/2010 000 VN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/19/2010 000 VN	ACW10
Uranium Suspended	0.190	0.001		mg/L	05/25/2010 1351 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	540	5		mg/L	05/20/2010 1830 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	26	5		mg/L	05/20/2010 1830 KO	SM 2320B
Chloride	8	1		mg/L	05/20/2010 2148 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	05/20/2010 1830 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	05/28/2010 1651 AS	EPA 353.2
Sulfate	670	1		mg/L	05/20/2010 2148 KO	EPA 300.0

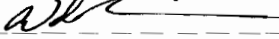
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-001
Client Sample ID: 34-18OZ
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 12:00:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	6	1		mg/L	05/20/2010 1525 RS	EPA 200.7
Magnesium	2	1		mg/L	05/20/2010 1525 RS	EPA 200.7
Potassium	6	1		mg/L	05/20/2010 1525 RS	EPA 200.7
Sodium	486	1		mg/L	05/20/2010 1525 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.84	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Carbonate as CO ₃	0.86	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Chloride	0.22	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sulfate	13.95	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Calcium	0.28	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Magnesium	0.17	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Potassium	0.16	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sodium	21.12	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.75	0		meq/L	05/25/2010 905 KO	SM 1030E
Anion Sum	23.91	0		meq/L	05/25/2010 905 KO	SM 1030E
Cation-Anion Balance	4.72	0		%	05/25/2010 905 KO	SM 1030E

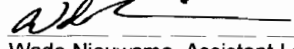
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-001
Client Sample ID: 34-18OZ
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 12:00:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/20/2010 1525 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/20/2010 1622 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/20/2010 1622 MS	EPA 200.8
Boron	0.4	0.1		mg/L	05/20/2010 1525 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/20/2010 1622 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/20/2010 1525 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/20/2010 1622 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/20/2010 1525 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/20/2010 1622 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1025 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/20/2010 1622 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/20/2010 1525 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/20/2010 1622 MS	EPA 200.8
Uranium	0.059	0.001		mg/L	05/20/2010 1622 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/20/2010 1622 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/20/2010 1525 RS	EPA 200.7
Total Metals						
Iron	0.10	0.05		mg/L	05/21/2010 1849 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/21/2010 1849 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010

Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-004
Client Sample ID: 34-18 SM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 2:50:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.61	s.u.			05/18/2010 1450	Field
Conductivity	2610	µm		hos/cm	05/18/2010 1450	Field
Dissolved Oxygen	8.15	mg		/L	05/18/2010 1450	Field
Dissolved Oxygen (pct)	85.2			%	05/18/2010 1450	Field
Redox Potential	+68	mV			05/18/2010 1450	Field
Turbidity	5.79	NT		U	05/18/2010 1450	Field
Temperature	18.4	°C			05/18/2010 1450	Field
General Parameters						
pH	11.5	0.1		s.u.	05/20/2010 1917 KO	SM 4500 H B
Electrical Conductivity	2190	5		µmhos/cm	05/20/2010 1917 KO	SM 2510B
Total Dissolved Solids (180)	1100	10		mg/L	05/20/2010 1630 MJH	SM 2540
Solids, Total Dissolved (Calc)	960	10		mg/L	05/25/2010 905 KO	SM 1030E
Alkalinity, Total (As CaCO3)	486	5		mg/L	05/20/2010 1917 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.4	0.1		mg/L	06/02/2010 1508 AS	EPA 350.1
Gross Alpha	ND	2		pCi/L	06/21/2010 910 SH	SM 7110B
Gross Beta	17.3 ± 3.9	3		pCi/L	06/21/2010 910 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/14/2010 1502 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 2247 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/18/2010 2000 SH	Ra-05
Lead 210	ND	1		pCi/L	06/10/2010 1437 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/10/2010 1901 SH	OTW01
Polonium 210	ND	1		pCi/L	06/08/2010 2013 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/09/2010 1821 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Uranium Suspended	0.008	0.001		mg/L	05/25/2010 1402 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO3	ND	5		mg/L	05/20/2010 1917 KO	SM 2320B
Alkalinity, Carbonate as CO3	173	5		mg/L	05/20/2010 1917 KO	SM 2320B
Chloride	5	1		mg/L	05/20/2010 2343 KO	EPA 300.0
Fluoride	1.3	0.1		mg/L	05/20/2010 1917 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	05/28/2010 1700 AS	EPA 353.2
Sulfate	295	1		mg/L	05/20/2010 2343 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-004
Client Sample ID: 34-18 SM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 2:50:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	1	1		mg/L	05/20/2010 1536 RS	EPA 200.7
Magnesium	ND	1		mg/L	05/20/2010 1536 RS	EPA 200.7
Potassium	28	1		mg/L	05/20/2010 1536 RS	EPA 200.7
Sodium	342	1		mg/L	05/20/2010 1536 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Carbonate as CO ₃	5.76	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Chloride	0.15	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sulfate	6.14	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Calcium	0.06	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Magnesium	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Potassium	0.72	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sodium	14.86	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.66	0		meq/L	05/25/2010 905 KO	SM 1030E
Anion Sum	16.08	0		meq/L	05/25/2010 905 KO	SM 1030E
Cation-Anion Balance	1.32	0		%	05/25/2010 905 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-004
Client Sample ID: 34-18 SM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 2:50:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/20/2010 1536 RS	EPA 200.7
Arsenic	0.011	0.005		mg/L	05/20/2010 1638 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/20/2010 1638 MS	EPA 200.8
Boron	0.2	0.1		mg/L	05/20/2010 1536 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/20/2010 1638 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/20/2010 1536 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/20/2010 1638 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/20/2010 1536 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/20/2010 1638 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1038 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/20/2010 1638 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/20/2010 1536 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/20/2010 1638 MS	EPA 200.8
Uranium	ND	0.001		mg/L	05/20/2010 1638 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/20/2010 1638 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/20/2010 1536 RS	EPA 200.7
Total Metals						
Iron	0.12	0.05		mg/L	05/21/2010 1908 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/21/2010 1908 RS	EPA 200.7

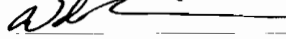
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-002
Client Sample ID: 34-7DM
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 1:35:00 PM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.92	s.u.			05/20/2010 1335	Field
Conductivity	3370	µm		hos/cm	05/20/2010 1335	Field
Dissolved Oxygen	7.77	mg		/L	05/20/2010 1335	Field
Dissolved Oxygen (pct)	74.9			%	05/20/2010 1335	Field
Redox Potential	+49	mV			05/20/2010 1335	Field
Turbidity	48.9	NT		U	05/20/2010 1335	Field
Temperature	13.7	°C			05/20/2010 1335	Field
General Parameters						
pH	10.1	0.1		s.u.	05/21/2010 2217 KO	SM 4500 H B
Electrical Conductivity	3080	5		µmhos/cm	05/21/2010 2217 KO	SM 2510B
Total Dissolved Solids (180)	1760	10		mg/L	05/21/2010 1550 MJH	SM 2540
Solids, Total Dissolved (Calc)	1900	10		mg/L	06/01/2010 1009 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	449	5		mg/L	05/21/2010 2217 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.8	0.1		mg/L	06/04/2010 1511 AS	EPA 350.1
Gross Alpha	4.4 ± 2.2	2		pCi/L	06/22/2010 1245 SH	SM 7110B
Gross Beta	10.5 ± 4.2	3		pCi/L	06/22/2010 1245 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/18/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/15/2010 1640 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/28/2010 2244 SH	Ra-05
Lead 210	ND	1		pCi/L	06/19/2010 1803 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/19/2010 2226 SH	OTW01
Polonium 210	ND	1		pCi/L	06/24/2010 2111 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/25/2010 1822 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/26/2010 951 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	143	5		mg/L	05/21/2010 2217 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	199	5		mg/L	05/21/2010 2217 KO	SM 2320B
Chloride	818	1		mg/L	05/22/2010 104 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	05/21/2010 2217 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 1000 AS	EPA 353.2
Sulfate	71	1		mg/L	05/22/2010 104 KO	EPA 300.0


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-002
Client Sample ID: 34-7DM
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 1:35:00 PM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	05/21/2010 1809 RS	EPA 200.7
Magnesium	ND	1		mg/L	05/21/2010 1809 RS	EPA 200.7
Potassium	23	1		mg/L	05/21/2010 1809 RS	EPA 200.7
Sodium	722	1		mg/L	05/21/2010 1809 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.34	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Carbonate as CO ₃	6.63	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Chloride	23.06	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sulfate	1.46	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Calcium	0.09	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Magnesium	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Potassium	0.59	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sodium	31.39	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	32.08	0		meq/L	06/01/2010 1009 KO	SM 1030E
Anion Sum	33.57	0		meq/L	06/01/2010 1009 KO	SM 1030E
Cation-Anion Balance	2.27	0		%	06/01/2010 1009 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-002
Client Sample ID: 34-7DM
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 1:35:00 PM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.5	0.1		mg/L	05/21/2010 1809 RS	EPA 200.7
Arsenic	0.009	0.005		mg/L	05/21/2010 1341 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/21/2010 1341 MS	EPA 200.8
Boron	0.9	0.1		mg/L	05/21/2010 1809 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/21/2010 1341 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/21/2010 1809 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/21/2010 1341 MS	EPA 200.8
Iron	0.21	0.05		mg/L	05/21/2010 1809 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/21/2010 1341 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1207 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/21/2010 1341 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/21/2010 1809 RS	EPA 200.7
Selenium	0.023	0.005		mg/L	05/21/2010 1341 MS	EPA 200.8
Uranium	0.002	0.001		mg/L	05/21/2010 1341 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/21/2010 1341 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/21/2010 1809 RS	EPA 200.7
Total Metals						
Iron	1.81	0.05		mg/L	05/24/2010 1719 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/24/2010 1719 RS	EPA 200.7

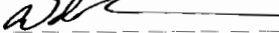
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-001
Client Sample ID: 34-7OZ
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 11:25:00 AM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.29	s.u.			05/20/2010 1125	Field
Conductivity	1992	µm		hos/cm	05/20/2010 1125	Field
Dissolved Oxygen	3.77	mg		/L	05/20/2010 1125	Field
Dissolved Oxygen (pct)	35.4			%	05/20/2010 1125	Field
Redox Potential	+106	mV			05/20/2010 1125	Field
Turbidity	0.80	NT		U	05/20/2010 1125	Field
Temperature	11.6	°C			05/20/2010 1125	Field
General Parameters						
pH	8.7	0.1		s.u.	05/21/2010 2206 KO	SM 4500 H B
Electrical Conductivity	2290	5		µmhos/cm	05/21/2010 2206 KO	SM 2510B
Total Dissolved Solids (180)	1590	10		mg/L	05/21/2010 1545 MJH	SM 2540
Solids, Total Dissolved (Calc)	1500	10		mg/L	06/01/2010 1009 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	522	5		mg/L	05/21/2010 2206 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	06/04/2010 1504 AS	EPA 350.1
Gross Alpha	46.1 ± 5.4	2		pCi/L	06/22/2010 1245 SH	SM 7110B
Gross Beta	18.3 ± 4.4	3		pCi/L	06/22/2010 1245 SH	SM 7110B
Radium 226 (Dissolved)	0.94 ± 0.15	0.2		pCi/L	06/18/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 2247 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/22/2010 034 SH	Ra-05
Lead 210	1.17 ± 0.88	1		pCi/L	06/19/2010 1803 SH	OTW01
Lead 210 Suspended	1.94 ± 0.65	1		pCi/L	06/30/2010 000 SH	OTW01
Polonium 210	ND	1		pCi/L	06/24/2010 2111 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/23/2010 2215 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/18/2010 000 WN	ACW10
Uranium Suspended	0.030	0.001		mg/L	05/26/2010 949 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	587	5		mg/L	05/21/2010 2206 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	24	5		mg/L	05/21/2010 2206 KO	SM 2320B
Chloride	5	1		mg/L	05/21/2010 2355 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	05/21/2010 2206 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 953 AS	EPA 353.2
Sulfate	644	1		mg/L	05/21/2010 2355 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-001
Client Sample ID: 34-7OZ
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 11:25:00 AM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	5	1		mg/L	05/21/2010 1807 RS	EPA 200.7
Magnesium	2	1		mg/L	05/21/2010 1807 RS	EPA 200.7
Potassium	12	1		mg/L	05/21/2010 1807 RS	EPA 200.7
Sodium	520	1		mg/L	05/21/2010 1807 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.62	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Carbonate as CO ₃	0.80	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Chloride	0.14	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sulfate	13.41	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Calcium	0.22	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Magnesium	0.19	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Potassium	0.29	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sodium	22.60	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.31	0		meq/L	06/01/2010 1009 KO	SM 1030E
Anion Sum	24.02	0		meq/L	06/01/2010 1009 KO	SM 1030E
Cation-Anion Balance	1.48	0		%	06/01/2010 1009 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-001
Client Sample ID: 34-7OZ
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 11:25:00 AM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/21/2010 1807 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/21/2010 1337 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/21/2010 1337 MS	EPA 200.8
Boron	0.4	0.1		mg/L	05/21/2010 1807 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/21/2010 1337 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/21/2010 1807 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/21/2010 1337 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/21/2010 1807 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/21/2010 1337 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1201 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/21/2010 1337 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/21/2010 1807 RS	EPA 200.7
Selenium	0.008	0.005		mg/L	05/21/2010 1337 MS	EPA 200.8
Uranium	0.038	0.001		mg/L	05/21/2010 1337 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/21/2010 1337 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/21/2010 1807 RS	EPA 200.7
Total Metals						
Iron	0.10	0.05		mg/L	05/24/2010 1710 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/24/2010 1710 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010

Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-001
Client Sample ID: 34-7SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 10:00:00 AM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.57	s.u.			06/05/2010 1000	Field
Conductivity	1325	µm		hos/cm	06/05/2010 1000	Field
Redox Potential	+63	mV			06/05/2010 1000	Field
Turbidity	0.60	NT		U	06/05/2010 1000	Field
Temperature	12.8	°C			06/05/2010 1000	Field
Static Water Level	22.92	ft			06/05/2010 1000	Field
General Parameters						
pH	9.1	0.1		s.u.	06/08/2010 2154 KO	SM 4500 H B
Electrical Conductivity	1200	5		µmhos/cm	06/09/2010 1036 KO	SM 2510B
Total Dissolved Solids (180)	810	10		mg/L	06/08/2010 1230 MJH	SM 2540
Solids, Total Dissolved (Calc)	720	10		mg/L	06/14/2010 1449 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	511	5		mg/L	06/08/2010 2154 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	06/21/2010 1152 AS	EPA 350.1
Gross Alpha	3.8 ± 1.7	2		pCi/L	06/30/2010 125 SH	SM 7110B
Gross Beta	7.7 ± 2.5	3		pCi/L	06/30/2010 125 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/28/2010 1555 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/02/2010 1301 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	06/29/2010 305 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	06/29/2010 1709 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	07/12/2010 1808 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/01/2010 2033 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/23/2010 2215 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	06/28/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/28/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	06/11/2010 1012 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	516	5		mg/L	06/08/2010 2154 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	53	5		mg/L	06/08/2010 2154 KO	SM 2320B
Chloride	3	1		mg/L	06/09/2010 032 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	06/08/2010 2154 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/17/2010 1709 AS	EPA 353.2
Sulfate	133	1		mg/L	06/09/2010 032 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-001
Client Sample ID: 34-7SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 10:00:00 AM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	06/08/2010 1232 RS	EPA 200.7
Magnesium	1	1		mg/L	06/08/2010 1232 RS	EPA 200.7
Potassium	11	1		mg/L	06/08/2010 1232 RS	EPA 200.7
Sodium	266	1		mg/L	06/08/2010 1232 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.45	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Carbonate as CO ₃	1.75	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Chloride	0.08	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sulfate	2.77	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Calcium	0.08	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Magnesium	0.08	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Potassium	0.27	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sodium	11.56	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.00	0		meq/L	06/14/2010 1449 KO	SM 1030E
Anion Sum	13.09	0		meq/L	06/14/2010 1449 KO	SM 1030E
Cation-Anion Balance	4.30	0		%	06/14/2010 1449 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-001
Client Sample ID: 34-7SA
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 10:00:00 AM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/08/2010 1232 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	06/08/2010 1130 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/08/2010 1130 MS	EPA 200.8
Boron	0.2	0.1		mg/L	06/08/2010 1232 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	06/08/2010 1130 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/08/2010 1232 RS	EPA 200.7
Copper	ND	0.01		mg/L	06/08/2010 1130 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/08/2010 1232 RS	EPA 200.7
Lead	ND	0.02		mg/L	06/08/2010 1130 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/10/2010 1151 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/08/2010 1130 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/08/2010 1232 RS	EPA 200.7
Selenium	ND	0.005		mg/L	06/08/2010 1130 MS	EPA 200.8
Uranium	ND	0.001		mg/L	06/08/2010 1130 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/08/2010 1130 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/08/2010 1232 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	06/08/2010 1337 RS	EPA 200.7
Manganese	ND	0.02		mg/L	06/08/2010 1337 RS	EPA 200.7

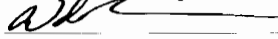
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-003
Client Sample ID: 34-7SM
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 2:35:00 PM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.79	s.u.			05/20/2010 1435	Field
Conductivity	1595	µm		hos/cm	05/20/2010 1435	Field
Dissolved Oxygen	4.09	mg		/L	05/20/2010 1435	Field
Dissolved Oxygen (pct)	39.3			%	05/20/2010 1435	Field
Redox Potential	+152	mV			05/20/2010 1435	Field
Turbidity	3.14	NT		U	05/20/2010 1435	Field
Temperature	12.1	°C			05/20/2010 1435	Field
General Parameters						
pH	9.0	0.1		s.u.	05/21/2010 2227 KO	SM 4500 H B
Electrical Conductivity	1840	5		µmhos/cm	05/21/2010 2227 KO	SM 2510B
Total Dissolved Solids (180)	1200	10		mg/L	05/21/2010 1600 MJH	SM 2540
Solids, Total Dissolved (Calc)	1130	10		mg/L	06/01/2010 1009 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	628	5		mg/L	05/21/2010 2227 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	06/04/2010 1512 AS	EPA 350.1
Gross Alpha	6.2 ± 2.8	2		pCi/L	06/22/2010 1245 SH	SM 7110B
Gross Beta	10.3 ± 4.0	3		pCi/L	06/22/2010 1245 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/20/2010 1805 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.28 ± 0.08	0.2		pCi/L	06/15/2010 1640 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/28/2010 2244 SH	Ra-05
Lead 210	1.34 ± 0.80	1		pCi/L	06/19/2010 1803 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/19/2010 2226 SH	OTW01
Polonium 210	ND	1		pCi/L	06/24/2010 2111 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/25/2010 1822 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/18/2010 000 VN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/18/2010 000 VN	ACW10
Uranium Suspended	0.311	0.001		mg/L	05/26/2010 958 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	631	5		mg/L	05/21/2010 2227 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	66	5		mg/L	05/21/2010 2227 KO	SM 2320B
Chloride	7	1		mg/L	05/22/2010 118 KO	EPA 300.0
Fluoride	1.0	0.1		mg/L	05/21/2010 2227 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 1001 AS	EPA 353.2
Sulfate	312	1		mg/L	05/22/2010 118 KO	EPA 300.0

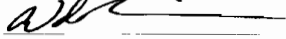
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-003
Client Sample ID: 34-7SM
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 2:35:00 PM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	05/21/2010 1812 RS	EPA 200.7
Magnesium	1	1		mg/L	05/21/2010 1812 RS	EPA 200.7
Potassium	13	1		mg/L	05/21/2010 1812 RS	EPA 200.7
Sodium	417	1		mg/L	05/21/2010 1812 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.34	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Carbonate as CO ₃	2.20	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Chloride	0.19	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sulfate	6.50	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Calcium	0.09	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Magnesium	0.08	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Potassium	0.32	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Sodium	18.14	0.01		meq/L	06/01/2010 1009 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.64	0		meq/L	06/01/2010 1009 KO	SM 1030E
Anion Sum	19.30	0		meq/L	06/01/2010 1009 KO	SM 1030E
Cation-Anion Balance	1.72	0		%	06/01/2010 1009 KO	SM 1030E

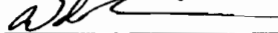
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/30/2010
Report ID: S1005305001

Project: STRATA/ROSS/09142
Lab ID: S1005305-003
Client Sample ID: 34-7SM
COC: 131378

Work Order: S1005305
Collection Date: 5/20/2010 2:35:00 PM
Date Received: 5/20/2010 4:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/21/2010 1812 RS	EPA 200.7
Arsenic	0.011	0.005		mg/L	05/21/2010 1344 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/21/2010 1344 MS	EPA 200.8
Boron	0.5	0.1		mg/L	05/21/2010 1812 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/21/2010 1344 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/21/2010 1812 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/21/2010 1344 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/21/2010 1812 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/21/2010 1344 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1209 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/21/2010 1344 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/21/2010 1812 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/21/2010 1344 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	05/21/2010 1344 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/21/2010 1344 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/21/2010 1812 RS	EPA 200.7
Total Metals						
Iron	0.11	0.05		mg/L	05/24/2010 1721 RS	EPA 200.7
Manganese	0.02	0.02		mg/L	05/24/2010 1721 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010

Report ID: S1005244002
(Replaces S1005244001)

Project: ROSS ISR
Lab ID: S1005244-001
Client Sample ID: 42-19 DM
COC: 131374

Work Order: S1005244
Collection Date: 5/17/2010 4:12:00 PM
Date Received: 5/18/2010 7:56:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	11.49	s.u.			05/17/2010 1612	Field
Conductivity	1525	µm		hos/cm	05/17/2010 1612	Field
Redox Potential	21	mV			05/17/2010 1612	Field
Turbidity	31.20	NT		U	05/17/2010 1612	Field
Temperature	21.7	°C			05/17/2010 1612	Field
General Parameters						
pH	10.9	0.1		s.u.	05/19/2010 2053 KO	SM 4500 H B
Electrical Conductivity	1600	5		µmhos/cm	05/19/2010 2053 KO	SM 2510B
Total Dissolved Solids (180)	960	10		mg/L	05/20/2010 956 MJH	SM 2540
Solids, Total Dissolved (Calc)	970	10		mg/L	05/24/2010 1203 KO	SM 1030E
Alkalinity, Total (As CaCO3)	352	5		mg/L	05/19/2010 2053 KO	SM 2320B
Nitrogen, Ammonia (As N)	2.1	0.1		mg/L	06/02/2010 1145 AS	EPA 350.1
Gross Alpha	ND	2		pCi/L	06/21/2010 910 SH	SM 7110B
Gross Beta	19.7 ± 4.1	3		pCi/L	06/21/2010 910 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/13/2010 1533 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 1845 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/14/2010 304 SH	Ra-05
Lead 210	ND	1		pCi/L	06/10/2010 1217 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/10/2010 1653 SH	OTW01
Polonium 210	ND	1		pCi/L	06/08/2010 1522 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/09/2010 1342 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Uranium Suspended	0.035	0.001		mg/L	05/25/2010 1319 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO3	ND	5		mg/L	05/19/2010 2053 KO	SM 2320B
Alkalinity, Carbonate as CO3	195	5		mg/L	05/19/2010 2053 KO	SM 2320B
Chloride	326	1		mg/L	05/20/2010 031 KO	EPA 300.0
Fluoride	1.6	0.1		mg/L	05/19/2010 2053 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	05/28/2010 1634 AS	EPA 353.2
Sulfate	30	1		mg/L	05/20/2010 031 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005244002
(Replaces S1005244001)

Project: ROSS ISR
Lab ID: S1005244-001
Client Sample ID: 42-19 DM
COC: 131374

Work Order: S1005244
Collection Date: 5/17/2010 4:12:00 PM
Date Received: 5/18/2010 7:56:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	4	1		mg/L	05/20/2010 1340 RS	EPA 200.7
Magnesium	ND	1		mg/L	05/20/2010 1340 RS	EPA 200.7
Potassium	27	1		mg/L	05/20/2010 1340 RS	EPA 200.7
Sodium	369	1		mg/L	05/20/2010 1340 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Carbonate as CO ₃	6.50	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Chloride	9.19	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Sulfate	0.62	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Calcium	0.21	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Magnesium	ND	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Potassium	0.68	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Sodium	16.05	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.94	0		meq/L	05/24/2010 1203 KO	SM 1030E
Anion Sum	16.94	0		meq/L	05/24/2010 1203 KO	SM 1030E
Cation-Anion Balance	0.01	0		%	05/24/2010 1203 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010

Report ID: S1005244002
(Replaces S1005244001)

Project: ROSS ISR
Lab ID: S1005244-001
Client Sample ID: 42-19 DM
COC: 131374

Work Order: S1005244
Collection Date: 5/17/2010 4:12:00 PM
Date Received: 5/18/2010 7:56:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.2	0.1		mg/L	05/20/2010 1340 RS	EPA 200.7
Arsenic	0.010	0.005		mg/L	05/19/2010 1745 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/19/2010 1745 MS	EPA 200.8
Boron	0.5	0.1		mg/L	05/20/2010 1340 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/19/2010 1745 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/20/2010 1340 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/19/2010 1745 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/20/2010 1340 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/19/2010 1745 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/21/2010 1207 BK	EPA 245.1
Molybdenum	0.03	0.02		mg/L	05/19/2010 1745 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/20/2010 1340 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/19/2010 1745 MS	EPA 200.8
Uranium	ND	0.001		mg/L	05/19/2010 1745 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/19/2010 1745 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/20/2010 1340 RS	EPA 200.7
Total Metals						
Iron	0.36	0.05		mg/L	05/20/2010 1756 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/20/2010 1756 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005244002
(Replaces S1005244001)

Project: ROSS ISR
Lab ID: S1005244-002
Client Sample ID: 42-19 OZ
COC: 131374

Work Order: S1005244
Collection Date: 5/17/2010 6:45:00 PM
Date Received: 5/18/2010 7:56:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.14	s.u.			05/17/2010 1845	Field
Conductivity	1876	µm		hos/cm	05/17/2010 1845	Field
Dissolved Oxygen	6.65	mg		/L	05/17/2010 1845	Field
Dissolved Oxygen (pct)	70.0			%	05/17/2010 1845	Field
Redox Potential	112	mV			05/17/2010 1845	Field
Turbidity	2.43	NT		U	05/17/2010 1845	Field
Temperature	12.1	°C			05/17/2010 1845	Field
General Parameters						
pH	8.8	0.1		s.u.	05/19/2010 2103 KO	SM 4500 H B
Electrical Conductivity	1850	5		µmhos/cm	05/19/2010 2103 KO	SM 2510B
Total Dissolved Solids (180)	1520	10		mg/L	05/20/2010 1001 MJH	SM 2540
Solids, Total Dissolved (Calc)	1470	10		mg/L	05/24/2010 1203 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	474	5		mg/L	05/19/2010 2103 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	06/02/2010 1146 AS	EPA 350.1
Gross Alpha	15.4 ± 3.3	2		pCi/L	06/21/2010 910 SH	SM 7110B
Gross Beta	9.8 ± 3.7	3		pCi/L	06/21/2010 910 SH	SM 7110B
Radium 226 (Dissolved)	1.36 ± 0.21	0.2		pCi/L	06/13/2010 1533 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 1845 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/14/2010 304 SH	Ra-05
Lead 210	ND	1		pCi/L	06/10/2010 1217 SH	OTW01
Lead 210 Suspended	1.35 ± 0.38	1		pCi/L	06/10/2010 1653 SH	OTW01
Polonium 210	ND	1		pCi/L	06/08/2010 1522 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/09/2010 1342 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Uranium Suspended	0.153	0.001		mg/L	05/25/2010 1329 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	519	5		mg/L	05/19/2010 2103 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	29	5		mg/L	05/19/2010 2103 KO	SM 2320B
Chloride	4	1		mg/L	05/20/2010 046 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	05/19/2010 2103 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	05/28/2010 1635 AS	EPA 353.2
Sulfate	640	1		mg/L	05/20/2010 046 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010

Report ID: S1005244002
(Replaces S1005244001)

Project: ROSS ISR
Lab ID: S1005244-002
Client Sample ID: 42-19 OZ
COC: 131374

Work Order: S1005244
Collection Date: 5/17/2010 6:45:00 PM
Date Received: 5/18/2010 7:56:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	6	1		mg/L	05/20/2010 1342 RS	EPA 200.7
Magnesium	2	1		mg/L	05/20/2010 1342 RS	EPA 200.7
Potassium	6	1		mg/L	05/20/2010 1342 RS	EPA 200.7
Sodium	532	1		mg/L	05/20/2010 1342 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.51	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Carbonate as CO ₃	0.96	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Chloride	0.12	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Sulfate	13.31	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Calcium	0.31	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Magnesium	0.19	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Potassium	0.14	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Sodium	23.13	0.01		meq/L	05/24/2010 1203 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.78	0		meq/L	05/24/2010 1203 KO	SM 1030E
Anion Sum	22.93	0		meq/L	05/24/2010 1203 KO	SM 1030E
Cation-Anion Balance	1.81	0		%	05/24/2010 1203 KO	SM 1030E

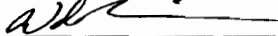
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005244002
(Replaces S1005244001)

Project: ROSS ISR
Lab ID: S1005244-002
Client Sample ID: 42-19 OZ
COC: 131374

Work Order: S1005244
Collection Date: 5/17/2010 6:45:00 PM
Date Received: 5/18/2010 7:56:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/20/2010 1342 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/19/2010 1749 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/19/2010 1749 MS	EPA 200.8
Boron	0.3	0.1		mg/L	05/20/2010 1342 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/19/2010 1749 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/20/2010 1342 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/19/2010 1749 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/20/2010 1342 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/19/2010 1749 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/21/2010 1209 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/19/2010 1749 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/20/2010 1342 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/19/2010 1749 MS	EPA 200.8
Uranium	0.010	0.001		mg/L	05/19/2010 1749 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/19/2010 1749 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/20/2010 1342 RS	EPA 200.7
Total Metals						
Iron	0.05	0.05		mg/L	05/20/2010 1801 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/20/2010 1801 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010

Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-005
Client Sample ID: 42-19 SM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 3:40:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	12.24	s.u.			05/18/2010 1540	Field
Conductivity	1452	µm		hos/cm	05/18/2010 1540	Field
Dissolved Oxygen	1.78	mg		/L	05/18/2010 1540	Field
Dissolved Oxygen (pct)	18.2			%	05/18/2010 1540	Field
Redox Potential	+34	mV			05/18/2010 1540	Field
Turbidity	5.39	NT		U	05/18/2010 1540	Field
Temperature	12.0	°C			05/18/2010 1540	Field
General Parameters						
pH	10.8	0.1		s.u.	05/20/2010 1928 KO	SM 4500 H B
Electrical Conductivity	1540	5		µmhos/cm	05/20/2010 1928 KO	SM 2510B
Total Dissolved Solids (180)	970	10		mg/L	05/20/2010 1640 MJH	SM 2540
Solids, Total Dissolved (Calc)	920	10		mg/L	05/25/2010 905 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	282	5		mg/L	05/20/2010 1928 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.4	0.1		mg/L	06/02/2010 1509 AS	EPA 350.1
Gross Alpha	ND	2		pCi/L	06/22/2010 1245 SH	SM 7110B
Gross Beta	6.8 ± 4.1	3		pCi/L	06/22/2010 1245 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	06/14/2010 1502 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 2247 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/18/2010 2000 SH	Ra-05
Lead 210	ND	1		pCi/L	06/10/2010 1437 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/10/2010 1901 SH	OTW01
Polonium 210	ND	1		pCi/L	06/08/2010 2013 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/09/2010 1821 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/19/2010 000 VN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/19/2010 000 VN	ACW10
Uranium Suspended	0.030	0.001		mg/L	05/25/2010 1405 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	05/20/2010 1928 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	152	5		mg/L	05/20/2010 1928 KO	SM 2320B
Chloride	5	1		mg/L	05/20/2010 2358 KO	EPA 300.0
Fluoride	1.5	0.1		mg/L	05/20/2010 1928 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	05/28/2010 1701 AS	EPA 353.2
Sulfate	405	1		mg/L	05/20/2010 2358 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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- 245 -

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-005
Client Sample ID: 42-19 SM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 3:40:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	1	1		mg/L	05/20/2010 1539 RS	EPA 200.7
Magnesium	ND	1		mg/L	05/20/2010 1539 RS	EPA 200.7
Potassium	11	1		mg/L	05/20/2010 1539 RS	EPA 200.7
Sodium	325	1		mg/L	05/20/2010 1539 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Carbonate as CO ₃	5.07	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Chloride	0.14	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sulfate	8.42	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Calcium	0.07	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Magnesium	ND	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Potassium	0.27	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Sodium	14.15	0.01		meq/L	05/25/2010 905 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	14.49	0		meq/L	05/25/2010 905 KO	SM 1030E
Anion Sum	14.28	0		meq/L	05/25/2010 905 KO	SM 1030E
Cation-Anion Balance	0.74	0		%	05/25/2010 905 KO	SM 1030E

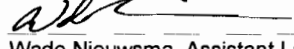
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005272002
(Replaces S1005272001)

Project: Strata/Ross/09142
Lab ID: S1005272-005
Client Sample ID: 42-19 SM
COC: 131376

Work Order: S1005272
Collection Date: 5/18/2010 3:40:00 PM
Date Received: 5/19/2010 8:20:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.1	0.1		mg/L	05/20/2010 1539 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/20/2010 1641 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/20/2010 1641 MS	EPA 200.8
Boron	0.4	0.1		mg/L	05/20/2010 1539 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/20/2010 1641 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/20/2010 1539 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/20/2010 1641 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/20/2010 1539 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/20/2010 1641 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/25/2010 1040 BK	EPA 245.1
Molybdenum	0.03	0.02		mg/L	05/20/2010 1641 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/20/2010 1539 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/20/2010 1641 MS	EPA 200.8
Uranium	ND	0.001		mg/L	05/20/2010 1641 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/20/2010 1641 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/20/2010 1539 RS	EPA 200.7
Total Metals						
Iron	0.11	0.05		mg/L	05/21/2010 1910 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/21/2010 1910 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006340001

Project: ROSS/09142
Lab ID: S1006340-002
Client Sample ID: SA 43-18-1
COC: 131390

Work Order: S1006340
Collection Date: 6/18/2010 12:25:00 PM
Date Received: 6/18/2010 3:13:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.96			s.u.	06/18/2010 1225	Field
Conductivity	7490			µmhos/cm	06/18/2010 1225	Field
Turbidity	881			NTU	06/18/2010 1225	Field
Temperature	9.9			°C	06/18/2010 1225	Field
Static Water Level	20.88			ft	06/18/2010 1225	Field
General Parameters						
pH	7.9	0.1		s.u.	06/21/2010 1429 KO	SM 4500 H B
Electrical Conductivity	6840	5		µmhos/cm	06/21/2010 1429 KO	SM 2510B
Total Dissolved Solids (180)	6600	10		mg/L	06/21/2010 1405 MJH	SM 2540
Solids, Total Dissolved (Calc)	5300	10		mg/L	08/02/2010 1346 LJK	SM 1030E
Alkalinity, Total (As CaCO ₃)	450	5		mg/L	06/21/2010 1429 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/01/2010 1750 AS	EPA 350.1
Gross Alpha	66 ± 12	12		pCi/L	07/10/2010 1009 SH	SM 7110B
Gross Beta	40 ± 11	18		pCi/L	07/10/2010 1009 SH	SM 7110B
Radium 226 (Dissolved)	0.53 ± 0.11	0.2		pCi/L	07/15/2010 1519 SH	SM 7500-Ra B
Radium 226 (Suspended)	3.45 ± 0.22	0.2		pCi/L	07/21/2010 1525 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/19/2010 2107 SH	Ra-05
Lead 210 Dissolved	ND	1		pCi/L	07/09/2010 000 SH	OTW01
Lead 210 Suspended	1.98 ± 0.50	1		pCi/L	07/12/2010 1556 SH	OTW01
Polonium 210 Dissolved	ND	1		pCi/L	07/09/2010 1913 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	07/07/2010 1737 SH	OTW01
Thorium 230 Dissolved	ND	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Thorium 230 Suspended	1.64 ± 0.36	0.2	L	pCi/L	07/15/2010 000 LJK	ACW10
Uranium Suspended	0.003	0.001		mg/L	06/25/2010 1132 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	549	5		mg/L	06/21/2010 1429 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	06/21/2010 1429 KO	SM 2320B
Chloride	53	1		mg/L	06/21/2010 1755 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	06/21/2010 1429 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	2.2	0.1		mg/L	06/29/2010 1700 AS	EPA 353.2
Sulfate	3270	1		mg/L	06/21/2010 1755 KO	EPA 300.0

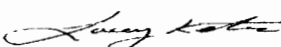
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager
December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006340001

Project: ROSS/09142
Lab ID: S1006340-002
Client Sample ID: SA 43-18-1
COC: 131390

Work Order: S1006340
Collection Date: 6/18/2010 12:25:00 PM
Date Received: 6/18/2010 3:13:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	337	1		mg/L	06/21/2010 1452 DG	EPA 200.7
Magnesium	162	1		mg/L	06/21/2010 1452 DG	EPA 200.7
Potassium	27	1		mg/L	06/21/2010 1452 DG	EPA 200.7
Sodium	1180	1		mg/L	06/21/2010 1452 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.00	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Chloride	1.48	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Fluoride	0.01	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Nitrate + Nitrite as N	0.15	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Sulfate	68.06	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Calcium	16.80	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Magnesium	13.30	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Potassium	0.70	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Sodium	51.26	0.01		meq/L	08/02/2010 1346 LJK	SM 1030E
Cation / Anion Balance						
Cation Sum	82.07	0		meq/L	08/02/2010 1346 LJK	SM 1030E
Anion Sum	78.72	0		meq/L	08/02/2010 1346 LJK	SM 1030E
Cation-Anion Balance	2.08	0		%	08/02/2010 1346 LJK	SM 1030E

These results apply only to the samples tested.

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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/2/2010
Report ID: S1006340001

Project: ROSS/09142
Lab ID: S1006340-002
Client Sample ID: SA 43-18-1
COC: 131390

Work Order: S1006340
Collection Date: 6/18/2010 12:25:00 PM
Date Received: 6/18/2010 3:13:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/21/2010 1452 DG	EPA 200.7
Arsenic	0.005	0.005		mg/L	06/18/2010 1853 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/18/2010 1853 MS	EPA 200.8
Boron	0.2	0.1		mg/L	06/21/2010 1452 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/18/2010 1853 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/21/2010 1452 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/18/2010 1853 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/21/2010 1452 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/18/2010 1853 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/24/2010 808 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/18/2010 1853 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/21/2010 1452 DG	EPA 200.7
Selenium	0.057	0.005		mg/L	06/18/2010 1853 MS	EPA 200.8
Uranium	0.062	0.001		mg/L	06/18/2010 1853 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/18/2010 1853 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/21/2010 1452 DG	EPA 200.7
Total Metals						
Iron	19.7	0.05		mg/L	06/21/2010 1759 DG	EPA 200.7
Manganese	0.95	0.02		mg/L	06/21/2010 1759 DG	EPA 200.7

These results apply only to the samples tested.

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RL - Reporting Limit

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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

Page 6 of 6



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-005
Client Sample ID: SA43-18-3
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 5:30:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.16	s.u.			06/05/2010 1730	Field
Conductivity	867	µm		hos/cm	06/05/2010 1730	Field
Redox Potential	+83	mV			06/05/2010 1730	Field
Turbidity	Out of Range	NT		U	06/05/2010 1730	Field
Temperature	9.0	°C			06/05/2010 1730	Field
Static Water Level	13.03	ft			06/05/2010 1730	Field
General Parameters						
pH	8.4	0.1		s.u.	06/08/2010 2247 KO	SM 4500 H B
Electrical Conductivity	761	5		µmhos/cm	06/09/2010 1043 KO	SM 2510B
Total Dissolved Solids (180)	510	10		mg/L	06/08/2010 1255 MJH	SM 2540
Solids, Total Dissolved (Calc)	480	10		mg/L	06/14/2010 1449 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	369	5		mg/L	06/08/2010 2247 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	06/21/2010 1156 AS	EPA 350.1
Gross Alpha	17.0 ± 3.5	2		pCi/L	06/30/2010 125 SH	SM 7110B
Gross Beta	12.5 ± 2.7	3		pCi/L	06/30/2010 125 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	06/28/2010 1555 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/02/2010 2227 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	435	5		mg/L	06/08/2010 2247 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	7	5		mg/L	06/08/2010 2247 KO	SM 2320B
Chloride	1	1		mg/L	06/09/2010 136 KO	EPA 300.0
Fluoride	0.7	0.1		mg/L	06/08/2010 2247 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.4	0.1		mg/L	06/17/2010 1713 AS	EPA 353.2
Sulfate	65	1		mg/L	06/09/2010 136 KO	EPA 300.0
Cations						
Calcium	21	1		mg/L	06/08/2010 1248 RS	EPA 200.7
Magnesium	13	1		mg/L	06/08/2010 1248 RS	EPA 200.7
Potassium	4	1		mg/L	06/08/2010 1248 RS	EPA 200.7
Sodium	152	1		mg/L	06/08/2010 1248 RS	EPA 200.7

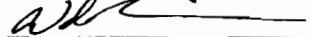
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/20/2010
Report ID: S1006135001

Project: ROSS ISR
Lab ID: S1006135-005
Client Sample ID: SA43-18-3
COC: 130606

Work Order: S1006135
Collection Date: 6/5/2010 5:30:00 PM
Date Received: 6/7/2010 8:50:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.13	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Carbonate as CO ₃	0.24	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Chloride	0.03	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sulfate	1.34	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Calcium	1.05	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Magnesium	1.10	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Potassium	0.10	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Sodium	6.63	0.01		meq/L	06/14/2010 1449 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	8.89	0		meq/L	06/14/2010 1449 KO	SM 1030E
Anion Sum	8.79	0		meq/L	06/14/2010 1449 KO	SM 1030E
Cation-Anion Balance	0.55	0		%	06/14/2010 1449 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/08/2010 1248 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	06/08/2010 1159 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/08/2010 1159 MS	EPA 200.8
Boron	0.1	0.1		mg/L	06/08/2010 1248 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	06/08/2010 1159 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/08/2010 1248 RS	EPA 200.7
Copper	ND	0.01		mg/L	06/08/2010 1159 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/08/2010 1248 RS	EPA 200.7
Lead	ND	0.02		mg/L	06/08/2010 1159 MS	EPA 200.8
Mercury	ND	0.001		mg/L	06/15/2010 817 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/08/2010 1159 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/08/2010 1248 RS	EPA 200.7
Selenium	ND	0.005		mg/L	06/08/2010 1159 MS	EPA 200.8
Uranium	0.013	0.001		mg/L	06/08/2010 1159 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/08/2010 1159 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/08/2010 1248 RS	EPA 200.7
Total Metals						
Iron	24.6	0.05		mg/L	06/08/2010 1356 RS	EPA 200.7
Manganese	0.45	0.02		mg/L	06/08/2010 1356 RS	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J

SAMPLING INFORMATION

Sampling Point 12-18 DM Project ROSS / STRATA
 Location 44.581741 - 104.96322 W.O.# 2009142
 Sample ID# 12-18 DM Date Sampled 8 / 10 / 10 Time 1625 am pm
 Describe Sampling Point _____

Well Depth 640 ft below MP Depth to Water (below MP) 175.80 ft Casing Diameter 5 in
 Date 8 / 10 / 10 Time 1315 am pm Casing Volume 464.18 gal ³⁹³

At least _____ bore volumes have been evacuated before sampling

Sampling method ☐ Submersible pump ☐ Tap ☐ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____	gpm
x _____	
	0.00223
	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1430	10.15	2460	16.5	—	6.91	263.51		2
1535	9.97	2370	17.6	—	2.74	301.33		↓
1625	10.20	2420	16.3	-23	3.35	369.18		↓

Pumping Start Time 1330 WL _____ Pumping End Time _____ WL _____

Comments: _____

DO 70.2% 6.69 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-1802 Project ROSS/STRATA
Location _____ W.O.# 2009142.24
Sample ID# 12-1802 Date Sampled 7/22/10 Time 0920 am pm
Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) _____ ft Casing Diameter 5 in
Date 7/22/10 Time _____ am pm Casing Volume _____ gal

At least 3 bore volumes have been evacuated before sampling
Sampling method Submersible pump Bladder pump / low flow
' Tap ' Bailer _____

Static Water Levels of Associated Wells

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0920	8.56	2400	13.8	0.23		~7200	56 gpm

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: SAMPLED AT 24 HOURS OF PUMPING DURING 12-18

PUMP TEST 7/21/10 - 7/24/10

DO = 28.29% / 2.71 mg/L

ORP = +168

Form completed by: J. ROGERS LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 12-18 SA Project ROSC / STRATA
Location 44.58154/-104.96320 W.O.# 2009142
Sample ID# 12-18 SA Date Sampled 8 / 11 / 10 Time 1130 (am) pm
Describe Sampling Point _____

Well Depth 115 ft below MP Depth to Water (below MP) 47.71 ft Casing Diameter 5 in
Date 8 / 11 / 10 Time 0940 (am) pm Casing Volume 67.29 gal ²⁰²

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump REDI FLOW
Tap _____ Bailer _____

Pump intake or bailer set at 105 ft below MP.

Tubing (type: PLASTIC). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1030	9.99	716	20.3	—	13.53	55.07		1.5
1100	10.06	731	21.0		9.69	57.48		↓
1130	9.97	725	20.2	180	6.08	64.69		↓

Pumping Start Time 0955 WL 46.22 Pumping End Time _____ WL _____

Comments: _____

DO = ~~20.70~~ 20.6% 1.82 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-18 SM Project ROSS / STRATA
 Location 44.58174/-104.96323 W.O.# 2009142
 Sample ID# 12-18 SM Date Sampled 8 / 10 / 10 Time 1635 am pm
 Describe Sampling Point _____

Well Depth 370 ft below MP Depth to Water (below MP) 91.87 ft Casing Diameter 5 in
 Date 8 / 10 / 10 Time 1315 am pm Casing Volume 276.43 gal 831

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1425	9.11	1585	14.4	—	0.93	122.69		2
1530	9.10	1646	14.6	—	1.23	126.18		↓
1635	9.06	1657	13.9	-10	0.84	127.69		

Pumping Start Time 1330 WL _____ Pumping End Time _____ WL _____

Comments: _____

DO 63.4 % 6.36 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-1802 Project STREAM/ROSS
Location 44.57444/-104.96009 W.O.# _____
Sample ID# _____ Date Sampled 7 112 10 Time _____ am pm
Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) 155.40 ft Casing Diameter _____ in
Date 7 112 10 Time 1012 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder pump / low flow
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells	
14-18 SA	
22.93 @	1014 hrs
14-18 SM	
66.72 @	1015
14-18 DM	
158.16 @	1018 hrs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time 1135 WL _____ Pumping End Time _____ WL _____

Comments: Partly Cloudy, SE Wind 25 + 15 mph 75°F
Oil/OK

PUMPING STARTED AT 11:35 @ 75 PSI w/ 10 GPM VALVE PUMPING RATE = 2.5 GPM

Form completed by: _____ LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 14-18SA Project STRATA/ROSS
Location _____ W.O.# 09142
Sample ID# 14-18SA Date Sampled 7 / 22 / 10 Time 1340 am pm
Describe Sampling Point _____

Well Depth 70 ft below MP Depth to Water (below MP) 23.11 ft Casing Diameter 5 in
Date 7 / 22 / 10 Time 1210 am pm Casing Volume 46.89 gal ¹⁴¹

At least 3 bore volumes have been evacuated before sampling
Sampling method Submersible pump Bladder pump / low flow
Tap Bailer REDI-FLOW

Pump intake or bailer set at 64 ft below MP.

Tubing (type: PLASTIC). (New or previously used) was used to collect all samples yes or no)
and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1250	9.21	1812	12.6	1.81	30.52	50 50	2.0
1315	8.76	1834	12.6	0.48	30.77	100	↓
1340	8.60	1834	12.7	0.10	30.83	150	✓

Pumping Start Time 1225 WL 22.40 Pumping End Time 1345 WL 30.83

Comments: SAMPLES ICD, INSTRUMENTS CALIBRATION

DO 18.10% 1.74 mg/L
ORP +132

Form completed by: J. Rogers

LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 14-18DM Project Ross ISR
Location _____ W.O.# _____
Sample ID# 14-18DM Date Sampled 7 124 1 10 Time 14:00 am pm
Describe Sampling Point _____

Well Depth 632 ^{575 ft Screen} ft below MP Depth to Water (below MP) 157.48' Casing Diameter 5" in
Date 7 124 1 10 Time 10:30 am pm Casing Volume 418 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailor _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____	gpm
x	0.00223
_____	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umho/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
10:50	9.42	2440	11.8	2.19	182	26	2 gpm ^{#Dole (where)}
11:25	9.41	2420	2.8	2.20	249.9	94	2
12:10	9.53	2430	13.1	2.01	344.50	174	2
13:00	9.56	2470	3.6	3.94	415.3	274	2
13:43	9.46	2380	3.6	4.23	—	~334	1.5
14:00	9.48	2370	3.7	4.03	—	—	1.5

Pumping Start Time 10:43 WL 157.5 Pumping End Time 14:10 WL —

Comments: USED 2gpm Dole Value. - From DARKNESS DUE to Drawdown to 1.5gpm

By 13:43

~~*TAP END DISCHARGE @ 13:30 14-18DM - pH 9.25, EC = 211.6°C~~
~~TORR-D-11-10~~

Form completed by: Ben Swiffer Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18SM Project ROSS ISR
Location _____ W.O.# _____
Sample ID# 14-18SM Date Sampled 7 124 1 10 Time 13:20 am pm
Describe Sampling Point _____

Well Depth 285 ^{Top Screen} ft below MP Depth to Water (below MP) 166.95' Casing Diameter 5 in
Date 7 124 1 10 Time 11:00 am pm Casing Volume 218 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE	
_____ gpm	
x <u>0.00223</u>	
	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	DO / Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
11:12	9.35	1582 µS	15.8 / 11.9°C	0.92 / ~356 mV	78.75	2 gal / 25 sec →	5
12:17	9.37	1624	21.3% / 11.9°C	0.84 / ~270 mV	88.25	350	5
13:08	9.31	1611	21.4% / 11.9°C	0.91 / ~200 mV	89.55	600	5

Pumping Start Time 11:07 WL 166.95' Pumping End Time 13:40 WL 89.05'
Comments: #1620 began Down Valve

TOOK FIELD DUPLICATE @ 13:30 → FD 14-18SM → pH = 9.25_{su}, EC = 1604 µS, T = 11.6°C, TURB = 0.11 NTU, ORP = -59 mV, DO = 2.59 mg/L @ 24.4% SAT.

Form completed by: BEAN SWIFFER Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19 DM Project ROSS / STRATA
 Location 44.570001-104.95762 W.O.# 2009142
 Sample ID# 21-19 DM Date Sampled 8 / 5 / 10 Time 1230 am pm
 Describe Sampling Point _____

Well Depth 580 ft below MP Depth to Water (below MP) 196.40 ft Casing Diameter 5 in
 Date 8 / 5 / 10 Time 0925 am pm Casing Volume 383.6 ~~275.4~~ gal 1151

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

DISCHARGE RATE

2.3 gpm
 x 0.00223

Pump intake or bailer set at _____ ft below MP.

cfs

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>1048</u>	<u>9.45</u>	<u>2440</u>	<u>13.4</u>	<u>—</u>	<u>4.27</u>	<u>418.43</u>	<u>156.40</u>	<u>2.3</u>
<u>1130</u>	<u>9.36</u>	<u>2410</u>	<u>13.7</u>		<u>4.47</u>	<u>418.59</u>	<u>253.0</u>	
<u>1230</u>	<u>9.30</u>	<u>2420</u>	<u>14.0</u>	<u>-140</u>	<u>5.02</u>	<u>473.60</u>		

Pumping Start Time 0940 WL 196.40 Pumping End Time _____ WL _____

Comments: NO DOLE VALVE, PUMPING WIDE OPEN @ 2:20 PM

FIELD #'S STABLE, SAMPLED AT 1230

DO = 26.7% / 2.58 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-1902 Project Ross/Strath
Location _____ W.O.# _____
Sample ID# 21-19-02 Date Sampled 7/15/10 Time _____ am pm
Describe Sampling Point End of 50' hose AFFIXED to well head

Well Depth 468 ft below MP Depth to Water (below MP) 214.35 ft Casing Diameter 5-in in
Date 7/15/10 Time _____ am pm Casing Volume 259 gal

At least 29 bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder pump / low flow
Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: 1/4" Galv. drop P.P.C.) (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

21-19 SA - 11.02
21-19 SM - 84.90
21-19 DM - 196.39

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
7-16-10						7,632	5.3
0950	8.78	2.56mS	12.6	0.00	257.51		

Pumping Start Time 7-15-10 0950 WL 214.35' Pumping End Time 7-16-10 0950 WL 257.51'

Comments: WATER LEVELS @ START OF PUMP TEST
Sampled at end of 24-hr. constant discharge test.
See pumping test field forms for additional information

Form completed by: M. Evans

LAB COC #: 131419

SAMPLING INFORMATION

Sampling Point 21-19 SA Project STRATA/ROSS
Location 44.57012/-104.95760 W.O.# 09142
Sample ID# 21-19 SA Date Sampled 7/22/10 Time 1135 am pm
Describe Sampling Point _____

Well Depth 40³⁰ ft below MP Depth to Water (below MP) 11.06 ft
Date 7/22/10 Time 1005 am pm

Casing Diameter 5 in
Casing Volume 18.94 (57) (87) gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder pump / low flow
Tap Bailer RED FLOW

Pump intake or bailer set at 37 ft below MP.

Tubing (type: PLASTIC). (New or previously used) was used to collect all samples yes (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1043	7.81	1003	13.2	6.39	18.04	19.0	.75
1109	7.95	987	13.2	1.76	18.14	38.0	↓
1135	7.90	984	13.3	1.47	18.29	57	↓

Pumping Start Time 1017 WL 10.80 Pumping End Time 1145 WL 18.29

Comments: SAMPLES ICSD. INSTRUMENTS CALIBRATED

DO 43.4% 4.33 mg/L
ORP +162

Form completed by: J. ROGERS LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 21-19 SM Project ROSS / STRATA
 Location 44.57000/-104.95762 W.O.# _____
 Sample ID# 21-19 SM Date Sampled 8 / 5 / 10 Time 1235 am pm
 Describe Sampling Point _____

Well Depth 320 ft below MP Depth to Water (below MP) 84.84 ft Casing Diameter 5 in
 Date 8 / 5 / 10 Time 0925 am pm Casing Volume 235.16 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

2.0 gpm
 x 0.00223
 cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1040	10.26	2360	12.9	—	2.01	97.90	156	2.0
1135	10.07	2320	13.3	—	3.76	98.48		
1235	9.97	2300	13.0	+160	2.61	99.21		

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: 2.0 GPM OLE VALVE INSTALLED

FIELD #'S STABLE, SAMPLED @ 1235

DD = 42.9% / 4.28 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 DM Project ROSS/STRATA
 Location 44.571361 -104.95065 W.O.# 2009142
 Sample ID# 34-18 DM Date Sampled 8/4/10 Time 1945 am pm
 Describe Sampling Point _____

Well Depth 640 ft below MP Depth to Water (below MP) 272.72 ft Casing Diameter 5 in
 Date 8/4/10 Time 1545 am pm Casing Volume 367.3 (1102) gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1715	10.24	2260	13.7	-	5.18	556.58		5.06 gpm
+1030 @ 1730 WELL PUMPED DRY - WILL LET IT RECOVER & SAMPLE								
1945	10.32	2240	13.8	+14	2.02			

Pumping Start Time 1600 WL 272.72 Pumping End Time _____ WL _____

Comments:

DO = 16.1% / 1.60 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 02 Project _____
 Location _____ W.O.# _____
 Sample ID# _____ Date Sampled ____/____/____ Time ____ am pm
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) 279.99 ft Casing Diameter _____ in
 Date ____/____/____ Time ____ am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder pump / low flow
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells
34-18 SM = 136.18
34-18 DM = 272.64
34-18 SA = DRY

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: 34-18SM 136.22 @ 15:18 34-18 DM = 272.67 @ 15:18
279 34-18 SM = 136.26 @ 17:11 34-18 DM = 272.70 @ 17:13
34-18 SM = 136.25 @ 18:45 34-18 DM = 272.73 @ 18:47

Form completed by: _____ LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 34-18 SA Project STRATA / ROSS
 Location 44.57138/-104.95080 W.O.# 09142
 Sample ID# 34-18 SA Date Sampled 7/22/10 Time 11:10 am pm
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) DRY ft Casing Diameter 5 in
 Date 7/22/10 Time 11:10 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder pump / low flow
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: DRY

Form completed by: J. Rogers LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 34-18 Sm Project ROSS/STRATA
Location 44.57136/-104.95065 W.O.# 2009142
Sample ID# 34-18 Sm Date Sampled 8 / 4 / 10 Time 2015 am pm
Describe Sampling Point _____

Well Depth 307 ft below MP Depth to Water (below MP) 136.25 ft Casing Diameter 5 in
Date 8 / 4 / 10 Time 1545 am pm Casing Volume 171 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1710 1725	PUMPED ORY / WILL LET IT RECOVER, AND THEN SAMPLE					274.60		2.0
1850								
2015	11.98	2470	14.1	+447	3.92			

Pumping Start Time 1600 WL 136.25 Pumping End Time _____ WL _____

Comments: _____

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7 DM Project ROSS/STRATA
Location 44.58760/-104.94738 W.O.# 2009142
Sample ID# 34-7 DM Date Sampled 8 / 10 / 10 Time 1245 am pm
Describe Sampling Point _____

Well Depth 550 ft below MP Depth to Water (below MP) 87.88 ft Casing Diameter 5 in
Date 8 / 10 / 10 Time 0945 am pm Casing Volume 462.12 ¹³⁸⁶ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump
Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1100	10.34	3450	15.3	—	32.0	363.93		40 gpm
1145	10.39	3420	16.2	—	32.7	407.22		↓
1245	10.52	3470	15.7	-28	60.0			

Pumping Start Time 1000 WL 56.08 Pumping End Time _____ WL _____

Comments:

DO = 67.9% / 16.70 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-702 Project ROSS ISR

Location _____ W.O.# _____

Sample ID# 34-702 Date Sampled 7 / 8 / 10 Time 1430 am pm

Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) 84.94 ft Casing Diameter _____ in

Date 7 / 7 / 2010 Time 15:45 am pm Casing Volume _____ gal

At least 24hr bore volumes have been evacuated before sampling

Sampling method Submersible pump 2 HP

Tap _____ Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for ORP

DISCHARGE RATE

_____ gpm

x 0.00223

cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. (mg/l and %)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
7-7-10 1645	9.14	2.90MS	12.3°C	1.44			15.8
7-8-10 0945	8.84	2.86MS	12.5	1.04			12.5
7-8-10 1430	8.87	2.88MS	12.5	0.93	1.43 mg/l / 13.4%	104	13.0

Pumping Start Time 7-7-10 15:45 WL 84.94 Pumping End Time 7-8-10 1545 WL _____

Comments: 24 hr Pump test

Form completed by: Bob Fuller Witnessed by: [Signature]

K:\WWCADM\FORMS\Monitor Well Sample Form.doc

SAMPLING INFORMATION

Sampling Point 34-7 SA Project STRATA/ROSS
Location 44.58735/-104.94716 W.O.# 09142
Sample ID# 34-7 SA Date Sampled 7/22/10 Time 1550 am pm
Describe Sampling Point _____

Well Depth 52 ft below MP Depth to Water (below MP) 22.11 ft Casing Diameter 5 in
Date 7/22/10 Time 1410 am pm Casing Volume 29.89 gal 90

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder pump / low flow
' Tap ' Bailer _____
REDI-FLOW

Pump intake or bailer set at 48 ft below MP.

Tubing (type: Plastic). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for N/A

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1450	9.62	1302	15.8	1.93	32.13	30	1.0
1520	9.42	1298	15.8	0.85	32.53	60	↓
1550	9.38	1294	15.9	0.37	32.62	90	↓

Pumping Start Time 1450 WL 21.30 Pumping End Time _____ WL _____

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO 41.2% 3.63 mg/L

ORP + 152

Form completed by: J. Roques

LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 34-7 SM Project ROSS/STREAM
Location 44.58750/-104.94738 W.O.# 2009142
Sample ID# 34-7 SM Date Sampled 8 / 10 / 10 Time 1205 am pm
Describe Sampling Point _____

Well Depth 240 ft below MP Depth to Water (below MP) 56.08 ft Casing Diameter 5 in
Date 8 / 10 / 10 Time 0945 am pm Casing Volume 552 gal
183.92 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1105	9.52	2060	13.0	—	3.74	80.65		2.0
1200	9.29	2060	13.2	—	2.92	81.29		↓
1255	9.23	2060	13.1	+177	2.11	81.40		↓

Pumping Start Time 1000 WL 56.08 Pumping End Time _____ WL _____

Comments: INSTALLED 2.0 GPM DOOR VALVE

DO 6.90% / 6.84 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 DM Project STRATA/ROSS
 Location 44.56424/-104.94839 W.O.# 2009142
 Sample ID# 42-19 DM Date Sampled 8/4/10 Time 1410 am pm
 Describe Sampling Point _____

Well Depth 610 ft below MP Depth to Water (below MP) 287.09 ft Casing Diameter 5 in
 Date 8/4/10 Time 1030 am pm Casing Volume 322.9 gal (968)

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder pump / low flow
 Tap Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1150	10.06	1921	13.9	11.56	513.95	323	4.76
1300	PUMPED DRY / PUMP SHUT OFF / RECOVERING				557.80	646	
1410	9.71	1970	16.0	11.67		969	

Pumping Start Time 1040 WL 287.09 Pumping End Time _____ WL 1415

Comments: _____

DO 71.5% / 6.73 mg/L
 ORP -42

Form completed by: J. ROGERS LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 42-190Z Project ROSS
Location _____ W.O.# _____
Sample ID# 42-190Z Date Sampled 7 / 10 / 10 Time 0830 (am) pm
Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) 301.31 ft Casing Diameter _____ in
Date 7 / 9 / 2010 Time 0930 (am) pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	D.O. (mg/l and %)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
7-9-10 1030	9.04	1916	13.7	1.75			2.3
7-9-10 1130	9.00	2.71mS	13.7	0.93			2.3
7-10-10 0830	8.97	2.81mS	13.0	0.70	0.94 / 8.9%	119	2.3

Pumping Start Time 7-9-10 0930 WL 301.31 Pumping End Time 7-10-10 0930 WL _____

Comments: 24hr Pump test

Form completed by:

Bob Fuller

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19SA Project ROSS / STRATA
 Location 44.56439/-104.94832 W.O.# 09142
 Sample ID# 42-19SA Date Sampled 7 / 22 / 10 Time 1605 am pm
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) DRY ft Casing Diameter 5 in
 Date 7 / 22 / 10 Time 1605 am pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder pump / low flow
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: DRY

Form completed by: J. Roars LAB COC #: _____

SAMPLING INFORMATION

Sampling Point 42-19 SM Project STRATA/ROSS
Location 44.56424/-104.94839 W.O.# 2009142
Sample ID# 42-19 SM Date Sampled 8 / 4 / 10 Time 1425 am pm
Describe Sampling Point _____

Well Depth 285 ft below MP Depth to Water (below MP) 155.60 Casing Diameter 5 in
Date 8 / 4 / 10 Time 1030 (am) pm Casing Volume 129.4 gal ⁽³⁸⁹⁾

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder pump / low flow
' Tap ' Bailer _____ DEDICATED

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1155	PUMPED DRY / PUMP SHUT OFF				229.70	130	1.75
1310						260	
1425	10.78	1642	16.3	6.39		390	

Pumping Start Time 1040 WL 155.60 Pumping End Time 1500 WL _____

Comments: USED 2.0 GPM DOLZ VALVE - PUMPING @ 1.75 GPM

DO: 54.3% / 4.95 mg/L
ORP: +188

Form completed by: J. ROGERS LAB COC #: _____

SAMPLING INFORMATION

Sampling Point SA 43-18 (SA43-18-1) Project ROSS / STRATA
Location 44.57638/-104.94813 W.O.# _____
Sample ID# SA 43-18 Date Sampled 7/13/10 Time 1125 am pm
Describe Sampling Point _____

Well Depth 30.2 ft below MP Depth to Water (below MP) 20.82 ft Casing Diameter 2 in
Date 7/13/10 Time 1105 am pm Casing Volume 1.53 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ☐ Submersible pump ☐ Bladder pump / low flow

☐ Tap

☒ Bailer

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

SA 43-18-2 11.06

SA 13-17-1 Dry

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1236	7.67	7210	17.8		26.52	3.0	
1018	7.78	7790	9.8	165	24.27	2.0	
1029	7.39	7810	9.6	205	26.44	5.5	
1040	7.85	7540	10.2	457	27.92	7.0	

Pumping Start Time 1019 WL 19.97 20.82 Pumping End Time 1125 AM WL 28.20

Comments:

SA 43-18-3 SAMPLED ON 7/13/10 @ 1005

Form completed by:

J. Rogers

LAB COC #:

SAMPLING INFORMATION

Sampling Point SA 43-18-2 Project ROSS / STRATIA
 Location _____ W.O.# _____
 Sample ID# SA 43-18-2 Date Sampled 7 114 110 Time 1240 am pm
 Describe Sampling Point _____

Well Depth 20.2 ft below MP Depth to Water (below MP) 11.02 ft Casing Diameter 2 in
 Date 7 114 110 Time 1130 am pm Casing Volume 1.498 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder pump / low flow
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1145	7.81	8520	10.2	670	14.81	2.0	
1157	7.80	8510	10.2	697	16.02	3.5	
1210	7.78	8550	10.0	883	16.25	5.0	

Pumping Start Time 1133 WL _____ Pumping End Time 1240 WL _____

Comments: _____

Form completed by: _____ LAB COC #: _____

SAMPLING INFORMATION

Sampling Point SA 43-18-3 Project BSS / STRATA
 Location _____ W.O.# _____
 Sample ID# SA 43-18-3 Date Sampled 7 / 13 / 10 Time 1005 (am) pm
 Describe Sampling Point _____

Well Depth 24.14 ft below MP Depth to Water (below MP) 14.75 ft Casing Diameter 2 in
 Date 7 / 13 / 10 Time 0929 am pm Casing Volume 1.53 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder pump / low flow
 Tap Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: Plastic). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

Static Water Levels of Associated Wells

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0940	7.99	761	14.7	012	15.34	2	
0948	8.11	751	14.0	200	15.61	4	
0954	7.78	814	13.3	52.6	15.65	6	

Pumping Start Time 0932 WL 14.70 Pumping End Time 1005 WL _____

Comments: _____

Form completed by: J. Rogers LAB COC #: _____



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-004
Client Sample ID: 12-18 DM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 4:25:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.20	s.u.			08/10/2010 1625	Field
Conductivity	2420	µm		hos/cm	08/10/2010 1625	Field
Dissolved Oxygen	6.69	mg		/L	08/10/2010 1625	Field
Dissolved Oxygen (pct)	70.2			%	08/10/2010 1625	Field
Turbidity	3.35	NT		U	08/10/2010 1625	Field
Temperature	16.3	°C			08/10/2010 1625	Field
Oxygen Reduction Potential (ORP)	-23	mV			08/10/2010 1625	Field
General Parameters						
pH	10.0	0.1		s.u.	08/13/2010 1415 KO	SM 4500 H B
Electrical Conductivity	2150	5		µmhos/cm	08/13/2010 1415 KO	SM 2510B
Total Dissolved Solids (180)	1260	10		mg/L	08/12/2010 1440 AMB	SM 2540
Solids, Total Dissolved (Calc)	1170	10		mg/L	08/26/2010 849 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	418	5		mg/L	08/13/2010 1415 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.9	0.1		mg/L	08/25/2010 1451 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	159	5		mg/L	08/13/2010 1415 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	172	5		mg/L	08/13/2010 1415 KO	SM 2320B
Chloride	395	1		mg/L	08/13/2010 1149 KO	EPA 300.0
Fluoride	1.0	0.1		mg/L	08/13/2010 1415 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/19/2010 1624 AS	EPA 353.2
Sulfate	29	1		mg/L	08/13/2010 1149 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	08/12/2010 1538 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/12/2010 1538 DG	EPA 200.7
Potassium	23	1		mg/L	08/12/2010 1538 DG	EPA 200.7
Sodium	470	1		mg/L	08/12/2010 1538 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-004
Client Sample ID: 12-18 DM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 4:25:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.61	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Carbonate as CO ₃	5.74	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Chloride	11.13	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sulfate	0.60	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Calcium	0.05	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Potassium	0.57	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sodium	20.44	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.07	0		meq/L	08/26/2010 849 KO	SM 1030E
Anion Sum	20.15	0		meq/L	08/26/2010 849 KO	SM 1030E
Cation-Anion Balance	2.25	0		%	08/26/2010 849 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	12.0 ± 3.7	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 2127 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/17/2010 2003 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/19/2010 2327 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/30/2010 1501 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/30/2010 1501 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/20/2010 1039 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-004
Client Sample ID: 12-18 DM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 4:25:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.3	0.1		mg/L	08/12/2010 1538 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	08/12/2010 1239 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1239 MS	EPA 200.8
Boron	0.7	0.1		mg/L	08/12/2010 1538 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1239 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1538 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1239 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1538 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1239 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/24/2010 731 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1239 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1538 DG	EPA 200.7
Selenium	0.013	0.005		mg/L	08/12/2010 1239 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1239 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/12/2010 1239 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1239 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1538 DG	EPA 200.7
Total Metals						
Iron	0.05	0.05		mg/L	08/12/2010 1932 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/12/2010 1932 DG	EPA 200.7

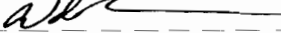
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-001
Client Sample ID: 12-180Z
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 9:20:00 AM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.56	s.u.			07/22/2010 920	Field
Conductivity	2400	µm		hos/cm	07/22/2010 920	Field
Dissolved Oxygen	2.71	mg		/L	07/22/2010 920	Field
Dissolved Oxygen (pct)	28.2			%	07/22/2010 920	Field
Redox Potential	+168	mV			07/22/2010 920	Field
Turbidity	0.23	NT		U	07/22/2010 920	Field
Temperature	13.8	°C			07/22/2010 920	Field
General Parameters						
pH	8.6	0.1		s.u.	07/23/2010 2307 LJK	SM 4500 H B
Electrical Conductivity	2160	5		µmhos/cm	07/23/2010 2307 LJK	SM 2510B
Total Dissolved Solids (180)	1490	10		mg/L	07/23/2010 950 MJH	SM 2540
Solids, Total Dissolved (Calc)	1400	10		mg/L	07/27/2010 908 KO	SM 1030E
Total Suspended Solids	ND	5	H	mg/L	08/11/2010 1400 AMB	SM 2540
Alkalinity, Total (As CaCO ₃)	533	5		mg/L	07/23/2010 2307 LJK	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	08/04/2010 1104 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	603	5		mg/L	07/23/2010 2307 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	24	5		mg/L	07/23/2010 2307 LJK	SM 2320B
Chloride	6	1		mg/L	07/26/2010 1847 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	07/26/2010 1619 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1523 AS	EPA 353.2
Sulfate	543	1		mg/L	07/26/2010 1847 KO	EPA 300.0
Cations						
Calcium	7	1		mg/L	07/23/2010 1742 RS	EPA 200.7
Magnesium	2	1		mg/L	07/23/2010 1742 RS	EPA 200.7
Potassium	4	1		mg/L	07/23/2010 1742 RS	EPA 200.7
Sodium	516	1		mg/L	07/23/2010 1742 RS	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-001
Client Sample ID: 12-180Z
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 9:20:00 AM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.87	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Carbonate as CO ₃	0.79	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Chloride	0.16	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sulfate	11.29	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Calcium	0.33	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Magnesium	0.16	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Potassium	0.10	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sodium	22.45	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.06	0		meq/L	07/27/2010 908 KO	SM 1030E
Anion Sum	22.17	0		meq/L	07/27/2010 908 KO	SM 1030E
Cation-Anion Balance	1.96	0		%	07/27/2010 908 KO	SM 1030E
Radio Chemistry						
Gross Alpha	177.0 ± 9.7	3.3		pCi/L	08/21/2010 1206 SH	SM 7110B
Gross Beta	43.2 ± 4.4	6.6		pCi/L	08/21/2010 1206 SH	SM 7110B
Radium 226 (Dissolved)	12.01 ± 0.46	0.2		pCi/L	08/29/2010 1816 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 1851 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/24/2010 224 SH	Ra-05
Lead 210 (Dissolved)	4.89 ± 0.56	1		pCi/L	08/20/2010 1827 SH	OTW01
Lead 210 (Suspended)	1.87 ± 0.45	1		pCi/L	08/21/2010 1729 SH	OTW01
Polonium 210 (Dissolved)	22.2 ± 2.2	1		pCi/L	08/24/2010 1255 SH	OTW01
Polonium 210 (Suspended)	17.2 ± 1.5	1		pCi/L	08/24/2010 2037 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1807 MS	EPA 200.8

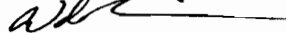
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-001
Client Sample ID: 12-18OZ
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 9:20:00 AM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1742 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1254 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1254 MS	EPA 200.8
Boron	0.5	0.1		mg/L	07/23/2010 1742 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1254 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1742 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1254 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/23/2010 1742 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1254 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 820 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1254 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1742 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/23/2010 1254 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1254 MS	EPA 200.8
Uranium	0.069	0.001		mg/L	07/23/2010 1254 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1254 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/23/2010 1742 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/26/2010 2017 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/26/2010 2017 DG	EPA 200.7

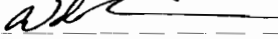
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-005
Client Sample ID: 12-18 SA
COC: 131427

Work Order: S1008187
Collection Date: 8/11/2010 11:30:00 AM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.97	s.u.			08/11/2010 1130	Field
Conductivity	725	µm		hos/cm	08/11/2010 1130	Field
Dissolved Oxygen	1.82	mg		/L	08/11/2010 1130	Field
Dissolved Oxygen (pct)	20.6			%	08/11/2010 1130	Field
Turbidity	6.08	NT		U	08/11/2010 1130	Field
Temperature	20.2	°C			08/11/2010 1130	Field
Oxygen Reduction Potential (ORP)	+180	mV			08/11/2010 1130	Field
General Parameters						
pH	9.8	0.1		s.u.	08/13/2010 1427 KO	SM 4500 H B
Electrical Conductivity	554	5		µmhos/cm	08/13/2010 1427 KO	SM 2510B
Total Dissolved Solids (180)	370	10		mg/L	08/12/2010 1445 AMB	SM 2540
Solids, Total Dissolved (Calc)	330	10		mg/L	08/26/2010 849 KO	SM 1030E
Alkalinity, Total (As CaCO3)	151	5		mg/L	08/25/2010 000 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	08/25/2010 1452 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	84	5		mg/L	08/25/2010 000 KO	SM 2320B
Alkalinity, Carbonate as CO3	49	5		mg/L	08/25/2010 000 KO	SM 2320B
Chloride	24	1		mg/L	08/25/2010 000 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/13/2010 1427 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/19/2010 1625 AS	EPA 353.2
Sulfate	94	1		mg/L	08/20/2010 000 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	08/24/2010 1435 DG	EPA 200.7
Magnesium	13	1		mg/L	08/24/2010 1435 DG	EPA 200.7
Potassium	20	1		mg/L	08/24/2010 1435 DG	EPA 200.7
Sodium	89	1		mg/L	08/24/2010 1435 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-005
Client Sample ID: 12-18 SA
COC: 131427

Work Order: S1008187
Collection Date: 8/11/2010 11:30:00 AM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	1.37	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Carbonate as CO ₃	1.64	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Chloride	0.68	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Fluoride	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sulfate	1.96	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Calcium	0.13	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Magnesium	1.07	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Potassium	0.51	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sodium	3.88	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	5.60	0		meq/L	08/26/2010 849 KO	SM 1030E
Anion Sum	5.66	0		meq/L	08/26/2010 849 KO	SM 1030E
Cation-Anion Balance	0.52	0		%	08/26/2010 849 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	13.5 ± 1.2	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	0.20 ± 0.07	0.2		pCi/L	09/10/2010 2127 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/17/2010 2003 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.0 ± 0.8	1		pCi/L	09/19/2010 2327 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/30/2010 1501 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/30/2010 1501 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/20/2010 1042 MS	EPA 200.8

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-005
Client Sample ID: 12-18 SA
COC: 131427

Work Order: S1008187
Collection Date: 8/11/2010 11:30:00 AM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1541 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1243 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1243 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/12/2010 1541 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1243 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1541 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1243 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1541 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1243 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 846 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1243 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1541 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/12/2010 1243 MS	EPA 200.8
Silver	0.006	0.003		mg/L	08/12/2010 1243 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/12/2010 1243 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1243 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1541 DG	EPA 200.7
Total Metals						
Iron	0.42	0.05		mg/L	08/12/2010 1934 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	08/12/2010 1934 DG	EPA 200.7

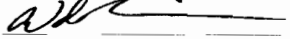
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-003
Client Sample ID: 12-18 SM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 4:35:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.06	s.u.			08/10/2010 1635	Field
Conductivity	1657	µm		hos/cm	08/10/2010 1635	Field
Dissolved Oxygen	6.36	mg		/L	08/10/2010 1635	Field
Dissolved Oxygen (pct)	63.4			%	08/10/2010 1635	Field
Turbidity	0.84	NT		U	08/10/2010 1635	Field
Temperature	13.9	°C			08/10/2010 1635	Field
Oxygen Reduction Potential (ORP)	-10	mV			08/10/2010 1635	Field
General Parameters						
pH	8.7	0.1		s.u.	08/13/2010 1405 KO	SM 4500 H B
Electrical Conductivity	1430	5		µmhos/cm	08/13/2010 1405 KO	SM 2510B
Total Dissolved Solids (180)	980	10		mg/L	08/12/2010 1435 AMB	SM 2540
Solids, Total Dissolved (Calc)	900	10		mg/L	08/26/2010 849 KO	SM 1030E
Alkalinity, Total (As CaCO3)	532	5		mg/L	08/13/2010 1405 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	08/25/2010 1450 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	598	5		mg/L	08/13/2010 1405 KO	SM 2320B
Alkalinity, Carbonate as CO3	25	5		mg/L	08/13/2010 1405 KO	SM 2320B
Chloride	3	1		mg/L	08/13/2010 1138 KO	EPA 300.0
Fluoride	1.9	0.1		mg/L	08/13/2010 1405 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/19/2010 1623 AS	EPA 353.2
Sulfate	212	1		mg/L	08/13/2010 1138 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	08/12/2010 1536 DG	EPA 200.7
Magnesium	1	1		mg/L	08/12/2010 1536 DG	EPA 200.7
Potassium	6	1		mg/L	08/12/2010 1536 DG	EPA 200.7
Sodium	354	1		mg/L	08/12/2010 1536 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-003
Client Sample ID: 12-18 SM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 4:35:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.80	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Carbonate as CO ₃	0.83	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Chloride	0.08	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Fluoride	0.10	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sulfate	4.40	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Calcium	0.15	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Magnesium	0.10	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Potassium	0.14	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sodium	15.37	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.77	0		meq/L	08/26/2010 849 KO	SM 1030E
Anion Sum	15.23	0		meq/L	08/26/2010 849 KO	SM 1030E
Cation-Anion Balance	1.73	0		%	08/26/2010 849 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	ND	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1920 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/17/2010 2003 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/19/2010 2327 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/26/2010 1424 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/26/2010 1424 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/20/2010 1036 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-003
Client Sample ID: 12-18 SM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 4:35:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1536 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1236 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1236 MS	EPA 200.8
Boron	0.5	0.1		mg/L	08/12/2010 1536 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1236 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1536 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1236 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1536 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1236 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 843 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1236 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1536 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/12/2010 1236 MS	EPA 200.8
Silver	0.004	0.003		mg/L	08/12/2010 1236 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/12/2010 1236 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1236 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1536 DG	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	08/12/2010 1929 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/12/2010 1929 DG	EPA 200.7

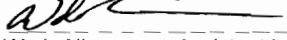
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010

Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-003
Client Sample ID: 14-18DM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 2:00:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.48	s.u.			07/24/2010 1400	Field
Conductivity	2370	µm		hos/cm	07/24/2010 1400	Field
Dissolved Oxygen	6.03	mg		/L	07/24/2010 1400	Field
Dissolved Oxygen (pct)	59.3			%	07/24/2010 1400	Field
Redox Potential	-95	mV			07/24/2010 1400	Field
Turbidity	14.03	NT		U	07/24/2010 1400	Field
Temperature	13.7	°C			07/24/2010 1400	Field
Static Water Level	157.48	ft			07/24/2010 1400	Field
General Parameters						
pH	9.0	0.1		s.u.	07/26/2010 2306 KO	SM 4500 H B
Electrical Conductivity	2190	5		µmhos/cm	07/26/2010 2306 KO	SM 2510B
Total Dissolved Solids (180)	1220	10		mg/L	07/27/2010 1024 MJH	SM 2540
Solids, Total Dissolved (Calc)	1170	10		mg/L	07/29/2010 805 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	416	5		mg/L	07/26/2010 2306 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	08/04/2010 1143 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	399	5		mg/L	07/26/2010 2306 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	54	5		mg/L	07/26/2010 2306 KO	SM 2320B
Chloride	437	1		mg/L	07/27/2010 1741 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	07/26/2010 2306 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1548 AS	EPA 353.2
Sulfate	1	1		mg/L	07/27/2010 1741 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	07/26/2010 2009 DG	EPA 200.7
Magnesium	ND	1		mg/L	07/26/2010 2009 DG	EPA 200.7
Potassium	15	1		mg/L	07/26/2010 2009 DG	EPA 200.7
Sodium	468	1		mg/L	07/26/2010 2009 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-003
Client Sample ID: 14-18DM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 2:00:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.53	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Carbonate as CO ₃	1.79	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Chloride	12.33	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Sulfate	0.02	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Calcium	0.14	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Magnesium	ND	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Potassium	0.38	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Sodium	20.37	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.89	0		meq/L	07/29/2010 805 KO	SM 1030E
Anion Sum	20.74	0		meq/L	07/29/2010 805 KO	SM 1030E
Cation-Anion Balance	0.36	0		%	07/29/2010 805 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	3.1		pCi/L	09/01/2010 808 SH	SM 7110B
Gross Beta	8.24 ± 3.57	6.7		pCi/L	09/01/2010 808 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/29/2010 2259 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2327 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/27/2010 319 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2312 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 2149 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1745 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1549 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1849 MS	EPA 200.8

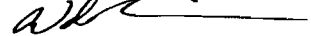
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-003
Client Sample ID: 14-18DM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 2:00:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/26/2010 2009 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/26/2010 1611 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/26/2010 1611 MS	EPA 200.8
Boron	0.8	0.1		mg/L	07/26/2010 2009 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/26/2010 1611 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/26/2010 2009 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/26/2010 1611 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/26/2010 2009 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/26/2010 1611 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/30/2010 716 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/26/2010 1611 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/26/2010 2009 DG	EPA 200.7
Selenium	0.012	0.005		mg/L	07/26/2010 1611 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/26/2010 1611 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/26/2010 1611 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/26/2010 1611 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	07/26/2010 2009 DG	EPA 200.7
Total Metals						
Iron	0.33	0.05		mg/L	07/28/2010 2246 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/28/2010 2246 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-003
Client Sample ID: 14-18OZ
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 2:36:00 PM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.77	s.u.			07/14/2010 1436	Field
Conductivity	3080	µm		hos/cm	07/14/2010 1436	Field
Dissolved Oxygen	2.76	mg		/L	07/14/2010 1436	Field
Dissolved Oxygen (pct)	27.0			%	07/14/2010 1436	Field
Redox Potential	-45	mV			07/14/2010 1436	Field
Turbidity	1.61	NT		U	07/14/2010 1436	Field
Temperature	12.7	°C			07/14/2010 1436	Field
General Parameters						
pH	8.6	0.1		s.u.	07/16/2010 1955 KO	SM 4500 H B
Electrical Conductivity	2780	5		µmhos/cm	07/16/2010 1955 KO	SM 2510B
Total Dissolved Solids (180)	1980	10		mg/L	07/19/2010 1105 MJH	SM 2540
Solids, Total Dissolved (Calc)	1920	10		mg/L	07/26/2010 857 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	07/20/2010 1045 MJH	SM 2540
Alkalinity, Total (As CaCO ₃)	520	5		mg/L	07/16/2010 1955 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	07/28/2010 1109 AS	EPA 350.1
Gross Alpha	165.3 ± 10.0	3.7		pCi/L	08/11/2010 922 SH	SM 7110B
Gross Beta	39.6 ± 4.6	6.6		pCi/L	08/11/2010 922 SH	SM 7110B
Radium 226 (Dissolved)	4.03 ± 0.25	0.2		pCi/L	08/16/2010 1557 SH	SM 7500-Ra B
Radium 226 (Suspended)	4.24 ± 0.27	0.2		pCi/L	08/13/2010 2012 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/23/2010 2212 SH	Ra-05
Lead 210 (Dissolved)	1.79 ± 0.42	1		pCi/L	08/15/2010 2316 SH	OTW01
Lead 210 (Suspended)	1.04 ± 0.27	1		pCi/L	08/17/2010 000 SH	OTW01
Polonium 210 (Dissolved)	5.04 ± 0.98	1		pCi/L	08/14/2010 2028 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 VN	ACW10
Thorium 230 (Suspended)	0.95±0.21	0.2	L	pCi/L	08/09/2010 000 VN	ACW10
Uranium Suspended	0.003	0.001		mg/L	07/26/2010 1654 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	591	5		mg/L	07/16/2010 1955 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	21	5		mg/L	07/16/2010 1955 KO	SM 2320B
Chloride	10	1		mg/L	07/22/2010 2343 LJK	EPA 300.0
Fluoride	0.5	0.1		mg/L	07/16/2010 1955 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/29/2010 1516 AS	EPA 353.2
Sulfate	937	1		mg/L	07/22/2010 2343 LJK	EPA 300.0

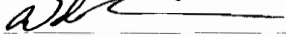
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-003
Client Sample ID: 14-18OZ
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 2:36:00 PM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	8	1		mg/L	07/16/2010 1527 DG	EPA 200.7
Magnesium	3	1		mg/L	07/16/2010 1527 DG	EPA 200.7
Potassium	7	1		mg/L	07/16/2010 1527 DG	EPA 200.7
Sodium	644	1		mg/L	07/16/2010 1527 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.69	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Carbonate as CO ₃	0.70	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Chloride	0.27	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Sulfate	19.51	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Calcium	0.40	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Magnesium	0.25	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Potassium	0.18	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Sodium	27.99	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	28.83	0		meq/L	07/26/2010 857 KO	SM 1030E
Anion Sum	30.21	0		meq/L	07/26/2010 857 KO	SM 1030E
Cation-Anion Balance	2.34	0		%	07/26/2010 857 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-003
Client Sample ID: 14-18OZ
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 2:36:00 PM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/16/2010 1527 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/16/2010 1551 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/16/2010 1551 MS	EPA 200.8
Boron	0.4	0.1		mg/L	07/16/2010 1527 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/16/2010 1551 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/16/2010 1527 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/16/2010 1551 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/16/2010 1527 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/16/2010 1551 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/20/2010 1209 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/16/2010 1551 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/16/2010 1527 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/19/2010 1312 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/16/2010 1551 MS	EPA 200.8
Uranium	0.109	0.001		mg/L	07/16/2010 1551 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/16/2010 1551 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/16/2010 1527 DG	EPA 200.7
Total Metals						
Iron	0.10	0.05		mg/L	07/19/2010 1413 RS	EPA 200.7
Manganese	ND	0.02		mg/L	07/19/2010 1413 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: _____

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-003
Client Sample ID: 14-18SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 1:40:00 PM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.60	s.u.			07/22/2010 1340	Field
Conductivity	1834	µm		hos/cm	07/22/2010 1340	Field
Dissolved Oxygen	1.74	mg		/L	07/22/2010 1340	Field
Dissolved Oxygen (pct)	18.1			%	07/22/2010 1340	Field
Redox Potential	+132	mV			07/22/2010 1340	Field
Turbidity	0.10	NT		U	07/22/2010 1340	Field
Temperature	12.7	°C			07/22/2010 1340	Field
Static Water Level	23.11	ft			07/22/2010 1340	Field
General Parameters						
pH	8.5	0.1		s.u.	07/23/2010 2327 LJK	SM 4500 H B
Electrical Conductivity	1800	5		µmhos/cm	07/23/2010 2327 LJK	SM 2510B
Total Dissolved Solids (180)	1200	10		mg/L	07/23/2010 1000 MJH	SM 2540
Solids, Total Dissolved (Calc)	1090	10		mg/L	07/27/2010 908 KO	SM 1030E
Alkalinity, Total (As CaCO3)	463	5		mg/L	07/23/2010 2327 LJK	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	08/04/2010 1106 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	544	5		mg/L	07/23/2010 2327 LJK	SM 2320B
Alkalinity, Carbonate as CO3	10	5		mg/L	07/23/2010 2327 LJK	SM 2320B
Chloride	68	1		mg/L	07/26/2010 1908 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	07/26/2010 1629 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1525 AS	EPA 353.2
Sulfate	315	1		mg/L	07/26/2010 1908 KO	EPA 300.0
Cations						
Calcium	18	1		mg/L	07/23/2010 1754 RS	EPA 200.7
Magnesium	10	1		mg/L	07/23/2010 1754 RS	EPA 200.7
Potassium	11	1		mg/L	07/23/2010 1754 RS	EPA 200.7
Sodium	391	1		mg/L	07/23/2010 1754 RS	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-003
Client Sample ID: 14-18SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 1:40:00 PM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.92	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Carbonate as CO ₃	0.34	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Chloride	1.91	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sulfate	6.56	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Calcium	0.91	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Magnesium	0.82	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Potassium	0.26	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sodium	17.01	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.02	0		meq/L	07/27/2010 908 KO	SM 1030E
Anion Sum	17.76	0		meq/L	07/27/2010 908 KO	SM 1030E
Cation-Anion Balance	3.42	0		%	07/27/2010 908 KO	SM 1030E
Radio Chemistry						
Gross Alpha	7.33 ± 2.51	3.2		pCi/L	08/21/2010 1206 SH	SM 7110B
Gross Beta	5.99 ± 3.59	6.7		pCi/L	08/21/2010 1206 SH	SM 7110B
Radium 226 (Dissolved)	0.26 ± 0.07	0.2		pCi/L	08/29/2010 1816 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 1851 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/24/2010 224 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 1827 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 1729 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1255 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 2037 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1816 MS	EPA 200.8

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-003
Client Sample ID: 14-18SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 1:40:00 PM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1754 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1301 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1301 MS	EPA 200.8
Boron	0.2	0.1		mg/L	07/23/2010 1754 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1301 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1754 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1301 MS	EPA 200.8
Iron	0.09	0.05		mg/L	07/23/2010 1754 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1301 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 824 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1301 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1754 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/23/2010 1301 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1301 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	07/23/2010 1301 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1301 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	07/23/2010 1754 RS	EPA 200.7
Total Metals						
Iron	0.14	0.05		mg/L	07/26/2010 2026 DG	EPA 200.7
Manganese	0.04	0.02		mg/L	07/26/2010 2026 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 9 of 12



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-001
Client Sample ID: 14-18SM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 1:20:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.31	s.u.			07/24/2010 1320	Field
Conductivity	1611	µm		hos/cm	07/24/2010 1320	Field
Dissolved Oxygen	2.44	mg		/L	07/24/2010 1320	Field
Dissolved Oxygen (pct)	22.8			%	07/24/2010 1320	Field
Redox Potential	-200	mV			07/24/2010 1320	Field
Turbidity	0.09	NT		U	07/24/2010 1320	Field
Temperature	11.9	°C			07/24/2010 1320	Field
Static Water Level	66.95	ft			07/24/2010 1320	Field
General Parameters						
pH	8.9	0.1		s.u.	07/26/2010 2245 KO	SM 4500 H B
Electrical Conductivity	1560	5		µmhos/cm	07/26/2010 2245 KO	SM 2510B
Total Dissolved Solids (180)	1010	10		mg/L	07/27/2010 1014 MJH	SM 2540
Solids, Total Dissolved (Calc)	970	10		mg/L	07/29/2010 805 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	581	5		mg/L	07/26/2010 2245 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	08/04/2010 1141 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	603	5		mg/L	07/26/2010 2245 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	52	5		mg/L	07/26/2010 2245 KO	SM 2320B
Chloride	2	1		mg/L	07/27/2010 1719 KO	EPA 300.0
Fluoride	1.6	0.1		mg/L	07/26/2010 2245 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1546 AS	EPA 353.2
Sulfate	238	1		mg/L	07/27/2010 1719 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	07/26/2010 2004 DG	EPA 200.7
Magnesium	1	1		mg/L	07/26/2010 2004 DG	EPA 200.7
Potassium	7	1		mg/L	07/26/2010 2004 DG	EPA 200.7
Sodium	373	1		mg/L	07/26/2010 2004 DG	EPA 200.7

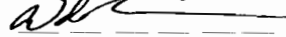
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 9



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-001
Client Sample ID: 14-18SM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 1:20:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.88	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Carbonate as CO ₃	1.73	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Chloride	0.06	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Sulfate	4.94	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Calcium	0.09	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Potassium	0.18	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Sodium	16.24	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.61	0		meq/L	07/29/2010 805 KO	SM 1030E
Anion Sum	16.71	0		meq/L	07/29/2010 805 KO	SM 1030E
Cation-Anion Balance	0.30	0		%	07/29/2010 805 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	3.5		pCi/L	09/01/2010 808 SH	SM 7110B
Gross Beta	ND	6.8		pCi/L	09/01/2010 808 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/29/2010 2024 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2112 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/27/2010 319 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2312 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 2149 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1745 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1549 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1839 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-001
Client Sample ID: 14-18SM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 1:20:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/26/2010 2004 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	07/26/2010 1604 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/26/2010 1604 MS	EPA 200.8
Boron	0.5	0.1		mg/L	07/26/2010 2004 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/26/2010 1604 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/26/2010 2004 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/26/2010 1604 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/26/2010 2004 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/26/2010 1604 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/30/2010 709 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/26/2010 1604 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/26/2010 2004 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/26/2010 1604 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/26/2010 1604 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/26/2010 1604 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/26/2010 1604 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/26/2010 2004 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/28/2010 2238 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/28/2010 2238 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-002
Client Sample ID: FD14-18SM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 1:30:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.25	s.u.			07/24/2010 1330	Field
Conductivity	1604	µm		hos/cm	07/24/2010 1330	Field
Dissolved Oxygen	2.59	mg		/L	07/24/2010 1330	Field
Dissolved Oxygen (pct)	24.4			%	07/24/2010 1330	Field
Redox Potential	-59	mV			07/24/2010 1330	Field
Turbidity	0.11	NT		U	07/24/2010 1330	Field
Temperature	11.6	°C			07/24/2010 1330	Field
General Parameters						
pH	8.9	0.1		s.u.	07/26/2010 2255 KO	SM 4500 H B
Electrical Conductivity	1570	5		µmhos/cm	07/26/2010 2255 KO	SM 2510B
Total Dissolved Solids (180)	1000	10		mg/L	07/27/2010 1019 MJH	SM 2540
Solids, Total Dissolved (Calc)	970	10		mg/L	07/29/2010 805 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	580	5		mg/L	07/26/2010 2255 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	08/04/2010 1142 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	615	5		mg/L	07/26/2010 2255 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	46	5		mg/L	07/26/2010 2255 KO	SM 2320B
Chloride	2	1		mg/L	07/27/2010 1730 KO	EPA 300.0
Fluoride	1.6	0.1		mg/L	07/26/2010 2255 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1547 AS	EPA 353.2
Sulfate	236	1		mg/L	07/27/2010 1730 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	07/26/2010 2007 DG	EPA 200.7
Magnesium	1	1		mg/L	07/26/2010 2007 DG	EPA 200.7
Potassium	7	1		mg/L	07/26/2010 2007 DG	EPA 200.7
Sodium	372	1		mg/L	07/26/2010 2007 DG	EPA 200.7

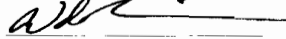
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-002
Client Sample ID: FD14-18SM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 1:30:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.07	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Carbonate as CO ₃	1.51	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Chloride	0.06	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Fluoride	0.08	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Sulfate	4.91	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Calcium	0.09	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Potassium	0.17	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Sodium	16.17	0.01		meq/L	07/29/2010 805 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.54	0		meq/L	07/29/2010 805 KO	SM 1030E
Anion Sum	16.65	0		meq/L	07/29/2010 805 KO	SM 1030E
Cation-Anion Balance	0.33	0		%	07/29/2010 805 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	3.9		pCi/L	09/01/2010 808 SH	SM 7110B
Gross Beta	7.04 ± 3.56	6.8		pCi/L	09/01/2010 808 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/29/2010 2024 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2112 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/27/2010 319 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2312 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 2149 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1745 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1549 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1846 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1007354002
(Replaces S1007354001)

Project: ROSS ISR
Lab ID: S1007354-002
Client Sample ID: FD14-18SM
COC: 131422

Work Order: S1007354
Collection Date: 7/24/2010 1:30:00 PM
Date Received: 7/26/2010 10:20:00 AM
Sampler: BS
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/26/2010 2007 DG	EPA 200.7
Arsenic	0.005	0.005		mg/L	07/26/2010 1608 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/26/2010 1608 MS	EPA 200.8
Boron	0.5	0.1		mg/L	07/26/2010 2007 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/26/2010 1608 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/26/2010 2007 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/26/2010 1608 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/26/2010 2007 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/26/2010 1608 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/30/2010 711 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/26/2010 1608 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/26/2010 2007 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/26/2010 1608 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/26/2010 1608 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/26/2010 1608 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/26/2010 1608 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/26/2010 2007 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/28/2010 2243 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/28/2010 2243 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-006
Client Sample ID: 21-19 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/5/2010 12:30:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.30	s.u.			08/05/2010 1230	Field
Conductivity	2420	µm		hos/cm	08/05/2010 1230	Field
Dissolved Oxygen	2.58	mg		/L	08/05/2010 1230	Field
Dissolved Oxygen (pct)	26.7			%	08/05/2010 1230	Field
Turbidity	5.02	NT		U	08/05/2010 1230	Field
Temperature	14.0	°C			08/05/2010 1230	Field
Oxygen Reduction Potential (ORP)	-140	mV			08/05/2010 1230	Field
General Parameters						
pH	9.2	0.1		s.u.	08/06/2010 1914 KO	SM 4500 H B
Electrical Conductivity	2130	5		µmhos/cm	08/06/2010 1914 KO	SM 2510B
Total Dissolved Solids (180)	1240	10		mg/L	08/06/2010 1245 AMB	SM 2540
Solids, Total Dissolved (Calc)	1170	10		mg/L	08/12/2010 746 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	429	5		mg/L	08/06/2010 1914 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	08/18/2010 1101 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	398	5		mg/L	08/06/2010 1914 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	62	5		mg/L	08/06/2010 1914 KO	SM 2320B
Chloride	425	1		mg/L	08/06/2010 1651 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	08/06/2010 1914 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/16/2010 1449 AS	EPA 353.2
Sulfate	2	1		mg/L	08/06/2010 1651 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	08/09/2010 946 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/09/2010 946 DG	EPA 200.7
Potassium	17	1		mg/L	08/09/2010 946 DG	EPA 200.7
Sodium	467	1		mg/L	08/09/2010 946 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-006
Client Sample ID: 21-19 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/5/2010 12:30:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.52	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Carbonate as CO ₃	2.06	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Chloride	11.98	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sulfate	0.03	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Calcium	0.15	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Potassium	0.42	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sodium	20.29	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.87	0		meq/L	08/12/2010 746 KO	SM 1030E
Anion Sum	20.66	0		meq/L	08/12/2010 746 KO	SM 1030E
Cation-Anion Balance	0.49	0		%	08/12/2010 746 KO	SM 1030E
Radio Chemistry						
Gross Alpha	3.53 ± 2.06	2		pCi/L	09/01/2010 000 SH	SM 7110B
Gross Beta	8.33 ± 3.95	3		pCi/L	09/01/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/10/2010 413 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/12/2010 931 MS	EPA 200.8

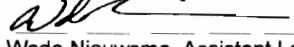
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-006
Client Sample ID: 21-19 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/5/2010 12:30:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/09/2010 946 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/06/2010 1015 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/06/2010 1015 MS	EPA 200.8
Boron	0.8	0.1		mg/L	08/09/2010 946 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/06/2010 1015 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/09/2010 946 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/06/2010 1015 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/09/2010 946 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/06/2010 1015 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/10/2010 1005 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/06/2010 1015 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/09/2010 946 DG	EPA 200.7
Selenium	0.009	0.005		mg/L	08/06/2010 1015 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/06/2010 1015 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/06/2010 1015 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/06/2010 1015 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/09/2010 946 DG	EPA 200.7
Total Metals						
Iron	0.17	0.05		mg/L	08/09/2010 1344 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/09/2010 1344 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007247001

Project: Ross
Lab ID: S1007247-001
Client Sample ID: 21-19OZ
COC: 131419

Work Order: S1007247
Collection Date: 7/16/2010 9:50:00 AM
Date Received: 7/16/2010 2:35:00 PM
Sampler: ME
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.78	s.u.			07/16/2010 950	Field
Conductivity	2560	µm		hos/cm	07/16/2010 950	Field
Dissolved Oxygen	1.73	mg		/L	07/16/2010 950	Field
Dissolved Oxygen (pct)	16.8			%	07/16/2010 950	Field
Redox Potential	76	mV			07/16/2010 950	Field
Turbidity	0.0	NT		U	07/16/2010 950	Field
Temperature	12.6	°C			07/16/2010 950	Field
General Parameters						
pH	8.5	0.1		s.u.	07/20/2010 1641 LJK	SM 4500 H B
Electrical Conductivity	2280	5		µmhos/cm	07/20/2010 1641 LJK	SM 2510B
Total Dissolved Solids (180)	1620	10		mg/L	07/19/2010 1440 MJH	SM 2540
Solids, Total Dissolved (Calc)	1580	10		mg/L	07/26/2010 1427 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	07/20/2010 1150 MJH	SM 2540
Alkalinity, Total (As CaCO ₃)	529	5		mg/L	07/20/2010 1641 LJK	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	07/28/2010 1131 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	609	5		mg/L	07/20/2010 1641 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	18	5		mg/L	07/20/2010 1641 LJK	SM 2320B
Chloride	8	1		mg/L	07/23/2010 223 LJK	EPA 300.0
Fluoride	0.5	0.1		mg/L	07/21/2010 1758 LJK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/23/2010 1436 AS	EPA 353.2
Sulfate	667	1		mg/L	07/23/2010 1301 LJK	EPA 300.0
Cations						
Calcium	7	1		mg/L	07/19/2010 1249 RS	EPA 200.7
Magnesium	2	1		mg/L	07/19/2010 1249 RS	EPA 200.7
Potassium	5	1		mg/L	07/19/2010 1249 RS	EPA 200.7
Sodium	574	1		mg/L	07/19/2010 1249 RS	EPA 200.7

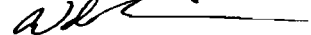
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007247001

Project: Ross
Lab ID: S1007247-001
Client Sample ID: 21-19OZ
COC: 131419

Work Order: S1007247
Collection Date: 7/16/2010 9:50:00 AM
Date Received: 7/16/2010 2:35:00 PM
Sampler: ME
Matrix: Water

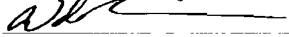
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.98	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Carbonate as CO ₃	0.59	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Chloride	0.23	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Sulfate	13.88	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Calcium	0.34	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Magnesium	0.18	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Potassium	0.12	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Sodium	24.94	0.01		meq/L	07/26/2010 1427 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	25.60	0		meq/L	07/26/2010 1427 KO	SM 1030E
Anion Sum	24.72	0		meq/L	07/26/2010 1427 KO	SM 1030E
Cation-Anion Balance	1.75	0		%	07/26/2010 1427 KO	SM 1030E
Radio Chemistry						
Gross Alpha	47.7 ± 5.2	3.6		pCi/L	08/21/2010 1206 SH	SM 7110B
Gross Beta	17.1 ± 4.0	7.2		pCi/L	08/21/2010 1206 SH	SM 7110B
Radium 226 (Dissolved)	0.71 ± 0.10	0.2		pCi/L	08/16/2010 1557 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/23/2010 2212 SH	Ra-05
Lead 210 (Dissolved)	1.35 ± 0.42	1		pCi/L	08/15/2010 2316 SH	OTW01
Lead 210 (Suspended)	32.2 ± 1.4	1		pCi/L	08/17/2010 000 SH	OTW01
Polonium 210 (Dissolved)	3.74 ± 0.84	1		pCi/L	08/14/2010 2028 SH	OTW01
Polonium 210 (Suspended)	25.4 ± 1.6	1		pCi/L	08/17/2010 000 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/26/2010 1657 MS	EPA 200.8

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007247001

Project: Ross
Lab ID: S1007247-001
Client Sample ID: 21-19OZ
COC: 131419

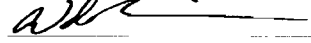
Work Order: S1007247
Collection Date: 7/16/2010 9:50:00 AM
Date Received: 7/16/2010 2:35:00 PM
Sampler: ME
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/19/2010 1249 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/16/2010 1751 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/16/2010 1751 MS	EPA 200.8
Boron	0.4	0.1		mg/L	07/19/2010 1249 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/16/2010 1751 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/19/2010 1249 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/16/2010 1751 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/19/2010 1249 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/16/2010 1751 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/20/2010 1331 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/16/2010 1751 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/19/2010 1249 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/19/2010 1433 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/16/2010 1751 MS	EPA 200.8
Uranium	0.024	0.001		mg/L	07/16/2010 1751 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/16/2010 1751 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/19/2010 1249 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/19/2010 1506 RS	EPA 200.7
Manganese	ND	0.02		mg/L	07/19/2010 1506 RS	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-002
Client Sample ID: 21-19SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 11:35:00 AM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.90	s.u.			07/22/2010 1135	Field
Conductivity	984	µm		hos/cm	07/22/2010 1135	Field
Dissolved Oxygen	4.33	mg		/L	07/22/2010 1135	Field
Dissolved Oxygen (pct)	43.4			%	07/22/2010 1135	Field
Redox Potential	+162	mV			07/22/2010 1135	Field
Turbidity	1.47	NT		U	07/22/2010 1135	Field
Temperature	13.3	°C			07/22/2010 1135	Field
Static Water Level	11.06	ft			07/22/2010 1135	Field
General Parameters						
pH	8.1	0.1		s.u.	07/23/2010 2318 LJK	SM 4500 H B
Electrical Conductivity	968	5		µmhos/cm	07/23/2010 2318 LJK	SM 2510B
Total Dissolved Solids (180)	620	10		mg/L	07/23/2010 955 MJH	SM 2540
Solids, Total Dissolved (Calc)	580	10		mg/L	07/27/2010 908 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	367	5		mg/L	07/23/2010 2318 LJK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2010 1105 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	447	5		mg/L	07/23/2010 2318 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	07/23/2010 2318 LJK	SM 2320B
Chloride	18	1		mg/L	07/26/2010 1858 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	07/26/2010 1623 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.0	0.1		mg/L	07/30/2010 1524 AS	EPA 353.2
Sulfate	118	1		mg/L	07/26/2010 1858 KO	EPA 300.0
Cations						
Calcium	36	1		mg/L	07/23/2010 1752 RS	EPA 200.7
Magnesium	15	1		mg/L	07/23/2010 1752 RS	EPA 200.7
Potassium	7	1		mg/L	07/23/2010 1752 RS	EPA 200.7
Sodium	165	1		mg/L	07/23/2010 1752 RS	EPA 200.7

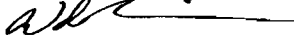
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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- 313 -



Sample Analysis Report

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1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
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(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-002
Client Sample ID: 21-19SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 11:35:00 AM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.33	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Chloride	0.50	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sulfate	2.45	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Calcium	1.78	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Magnesium	1.21	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Potassium	0.17	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sodium	7.18	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.35	0		meq/L	07/27/2010 908 KO	SM 1030E
Anion Sum	10.30	0		meq/L	07/27/2010 908 KO	SM 1030E
Cation-Anion Balance	0.25	0		%	07/27/2010 908 KO	SM 1030E
Radio Chemistry						
Gross Alpha	6.16 ± 1.55	2		pCi/L	08/22/2010 1038 SH	SM 7110B
Gross Beta	6.99 ± 2.16	3.6		pCi/L	08/22/2010 1038 SH	SM 7110B
Radium 226 (Dissolved)	0.23 ± 0.07	0.2		pCi/L	08/29/2010 1816 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 1851 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/24/2010 224 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 1827 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 1729 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1255 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 2037 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1814 MS	EPA 200.8


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RL - Reporting Limit

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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
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Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-002
Client Sample ID: 21-19SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 11:35:00 AM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1752 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1257 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1257 MS	EPA 200.8
Boron	0.1	0.1		mg/L	07/23/2010 1752 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1257 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1752 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1257 MS	EPA 200.8
Iron	0.06	0.05		mg/L	07/23/2010 1752 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1257 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 822 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1257 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1752 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/23/2010 1257 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1257 MS	EPA 200.8
Uranium	0.006	0.001		mg/L	07/23/2010 1257 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1257 MS	EPA 200.8
Zinc	0.09	0.01		mg/L	07/23/2010 1752 RS	EPA 200.7
Total Metals						
Iron	0.16	0.05		mg/L	07/26/2010 2021 DG	EPA 200.7
Manganese	0.18	0.02		mg/L	07/26/2010 2021 DG	EPA 200.7

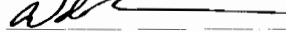
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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-005
Client Sample ID: 21-19 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/5/2010 12:35:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.97	s.u.			08/05/2010 1235	Field
Conductivity	2300	µm		hos/cm	08/05/2010 1235	Field
Dissolved Oxygen	4.28	mg		/L	08/05/2010 1235	Field
Dissolved Oxygen (pct)	42.9			%	08/05/2010 1235	Field
Turbidity	2.61	NT		U	08/05/2010 1235	Field
Temperature	13.0	°C			08/05/2010 1235	Field
Oxygen Reduction Potential (ORP)	+160	mV			08/05/2010 1235	Field
General Parameters						
pH	9.9	0.1		s.u.	08/06/2010 1904 KO	SM 4500 H B
Electrical Conductivity	2000	5		µmhos/cm	08/06/2010 1904 KO	SM 2510B
Total Dissolved Solids (180)	1310	10		mg/L	08/06/2010 1240 AMB	SM 2540
Solids, Total Dissolved (Calc)	1230	10		mg/L	08/12/2010 746 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	647	5		mg/L	08/06/2010 1904 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.1	0.1		mg/L	08/18/2010 1100 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	347	5		mg/L	08/06/2010 1904 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	218	5		mg/L	08/06/2010 1904 KO	SM 2320B
Chloride	3	1		mg/L	08/06/2010 1641 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	08/06/2010 1904 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/16/2010 1448 AS	EPA 353.2
Sulfate	336	1		mg/L	08/06/2010 1641 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	08/09/2010 943 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/09/2010 943 DG	EPA 200.7
Potassium	47	1		mg/L	08/09/2010 943 DG	EPA 200.7
Sodium	451	1		mg/L	08/09/2010 943 DG	EPA 200.7

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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-005
Client Sample ID: 21-19 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/5/2010 12:35:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.68	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Carbonate as CO ₃	7.25	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Chloride	0.08	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sulfate	6.99	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Calcium	0.06	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Potassium	1.19	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sodium	19.62	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.88	0		meq/L	08/12/2010 746 KO	SM 1030E
Anion Sum	20.06	0		meq/L	08/12/2010 746 KO	SM 1030E
Cation-Anion Balance	1.98	0		%	08/12/2010 746 KO	SM 1030E
Radio Chemistry						
Gross Alpha	6.60 ± 2.77	4		pCi/L	09/01/2010 000 SH	SM 7110B
Gross Beta	29.8 ± 4.4	6.8		pCi/L	09/01/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/10/2010 413 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/12/2010 924 MS	EPA 200.8

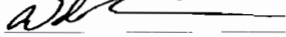
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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-005
Client Sample ID: 21-19 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/5/2010 12:35:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/09/2010 943 DG	EPA 200.7
Arsenic	0.009	0.005		mg/L	08/06/2010 1004 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/06/2010 1004 MS	EPA 200.8
Boron	0.6	0.1		mg/L	08/09/2010 943 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/06/2010 1004 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/09/2010 943 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/06/2010 1004 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/09/2010 943 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/06/2010 1004 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/10/2010 1003 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/06/2010 1004 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/09/2010 943 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/06/2010 1004 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/06/2010 1004 MS	EPA 200.8
Uranium	0.004	0.001		mg/L	08/06/2010 1004 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/06/2010 1004 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	08/09/2010 943 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	08/09/2010 1342 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/09/2010 1342 DG	EPA 200.7

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RL - Reporting Limit

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- ND Not Detected at the Reporting Limit
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-004
Client Sample ID: 34-18 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 7:45:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.32	s.u.			08/04/2010 1945	Field
Conductivity	2240	µm		hos/cm	08/04/2010 1945	Field
Dissolved Oxygen	1.60	mg		/L	08/04/2010 1945	Field
Dissolved Oxygen (pct)	16.1			%	08/04/2010 1945	Field
Turbidity	2.02	NT		U	08/04/2010 1945	Field
Temperature	13.8	°C			08/04/2010 1945	Field
Oxygen Reduction Potential (ORP)	+14	mV			08/04/2010 1945	Field
General Parameters						
pH	10.0	0.1		s.u.	08/06/2010 1835 KO	SM 4500 H B
Electrical Conductivity	1980	5		µmhos/cm	08/06/2010 1835 KO	SM 2510B
Total Dissolved Solids (180)	1110	10		mg/L	08/06/2010 1235 AMB	SM 2540
Solids, Total Dissolved (Calc)	1030	10		mg/L	08/12/2010 746 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	360	5		mg/L	08/06/2010 1835 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.8	0.1		mg/L	08/18/2010 1059 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	134	5		mg/L	08/06/2010 1835 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	150	5		mg/L	08/06/2010 1835 KO	SM 2320B
Chloride	371	1		mg/L	08/06/2010 1631 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	08/06/2010 1835 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/16/2010 1447 AS	EPA 353.2
Sulfate	15	1		mg/L	08/06/2010 1631 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	08/09/2010 936 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/09/2010 936 DG	EPA 200.7
Potassium	21	1		mg/L	08/09/2010 936 DG	EPA 200.7
Sodium	405	1		mg/L	08/09/2010 936 DG	EPA 200.7


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Reviewed by: 
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Sample Analysis Report

CLIENT: Western Water Consultants
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Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-004
Client Sample ID: 34-18 DM
COC: 131428

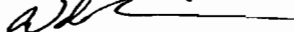
Work Order: S1008082
Collection Date: 8/4/2010 7:45:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.19	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Carbonate as CO ₃	5.00	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Chloride	10.45	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sulfate	0.31	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Calcium	0.07	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Potassium	0.53	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sodium	17.61	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.22	0		meq/L	08/12/2010 746 KO	SM 1030E
Anion Sum	18.03	0		meq/L	08/12/2010 746 KO	SM 1030E
Cation-Anion Balance	0.52	0		%	08/12/2010 746 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	3.5		pCi/L	09/01/2010 000 SH	SM 7110B
Gross Beta	10.1 ± 4.0	6.8		pCi/L	09/01/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2327 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/10/2010 413 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/12/2010 921 MS	EPA 200.8

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-004
Client Sample ID: 34-18 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 7:45:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/09/2010 936 DG	EPA 200.7
Arsenic	0.008	0.005		mg/L	08/06/2010 1000 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/06/2010 1000 MS	EPA 200.8
Boron	0.6	0.1		mg/L	08/09/2010 936 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/06/2010 1000 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/09/2010 936 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/06/2010 1000 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/09/2010 936 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/06/2010 1000 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/10/2010 1001 BK	EPA 245.1
Molybdenum	0.02	0.02		mg/L	08/06/2010 1000 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/09/2010 936 DG	EPA 200.7
Selenium	0.006	0.005		mg/L	08/06/2010 1000 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/06/2010 1000 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/06/2010 1000 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/06/2010 1000 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/09/2010 936 DG	EPA 200.7
Total Metals						
Iron	0.29	0.05		mg/L	08/09/2010 1332 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/09/2010 1332 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007188001

Project: STRATA/ROSS/09142
Lab ID: S1007188-001
Client Sample ID: 34-180Z
COC: 131417


Work Order: S1007188
Collection Date: 7/13/2010 1:32:00 PM
Date Received: 7/14/2010 9:06:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.77	s.u.			07/13/2010 1332	Field
Conductivity	2540	µm		hos/cm	07/13/2010 1332	Field
Dissolved Oxygen	2.21	mg		/L	07/13/2010 1332	Field
Dissolved Oxygen (pct)	21.5			%	07/13/2010 1332	Field
Redox Potential	-233	mV			07/13/2010 1332	Field
Turbidity	0.15	NT		U	07/13/2010 1332	Field
Temperature	13.2	°C			07/13/2010 1332	Field
General Parameters						
pH	8.4	0.1		s.u.	07/14/2010 1731 KO	SM 4500 H B
Electrical Conductivity	2260	5		µmhos/cm	07/14/2010 1731 KO	SM 2510B
Total Dissolved Solids (180)	1620	10		mg/L	07/14/2010 1510 AMB	SM 2540
Solids, Total Dissolved (Calc)	1470	10		mg/L	07/26/2010 919 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	07/15/2010 1450 AMB	SM 2540
Alkalinity, Total (As CaCO ₃)	497	5		mg/L	07/14/2010 1731 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	07/28/2010 1019 AS	EPA 350.1
Gross Alpha	76.0 ± 6.5	3.3		pCi/L	08/10/2010 838 SH	SM 7110B
Gross Beta	23.9 ± 3.9	6.6		pCi/L	08/10/2010 838 SH	SM 7110B
Radium 226 (Dissolved)	9.68 ± 0.38	0.2		pCi/L	08/16/2010 1348 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 2012 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/17/2010 315 SH	Ra-05
Lead 210 (Dissolved)	3.02 ± 0.61	1		pCi/L	08/15/2010 1842 SH	OTW01
Lead 210 (Suspended)	1.66 ± 0.38	1		pCi/L	08/17/2010 1012 SH	OTW01
Polonium 210 (Dissolved)	8.73 ± 1.29	1		pCi/L	08/14/2010 1818 SH	OTW01
Polonium 210 (Suspended)	6.93 ± 0.88	1		pCi/L	08/17/2010 1448 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/16/2010 1925 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	591	5		mg/L	07/14/2010 1731 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	8	5		mg/L	07/14/2010 1731 KO	SM 2320B
Chloride	8	1		mg/L	07/14/2010 1649 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	07/14/2010 1731 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.3	0.1		mg/L	07/23/2010 1316 AS	EPA 353.2
Sulfate	593	1		mg/L	07/14/2010 1649 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007188001

Project: STRATA/ROSS/09142
Lab ID: S1007188-001
Client Sample ID: 34-180Z
COC: 131417

Work Order: S1007188
Collection Date: 7/13/2010 1:32:00 PM
Date Received: 7/14/2010 9:06:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	6	1		mg/L	07/14/2010 1632 DG	EPA 200.7
Magnesium	2	1		mg/L	07/14/2010 1632 DG	EPA 200.7
Potassium	5	1		mg/L	07/14/2010 1632 DG	EPA 200.7
Sodium	557	1		mg/L	07/14/2010 1632 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.68	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Carbonate as CO ₃	0.26	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Chloride	0.21	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Nitrate + Nitrite as N	0.02	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Sulfate	12.33	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Calcium	0.31	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Magnesium	0.19	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Potassium	0.13	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Sodium	24.24	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.88	0		meq/L	07/26/2010 919 KO	SM 1030E
Anion Sum	22.55	0		meq/L	07/26/2010 919 KO	SM 1030E
Cation-Anion Balance	4.92	0		%	07/26/2010 919 KO	SM 1030E

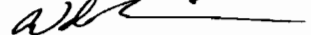
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007188001

Project: STRATA/ROSS/09142
Lab ID: S1007188-001
Client Sample ID: 34-180Z
COC: 131417

Work Order: S1007188
Collection Date: 7/13/2010 1:32:00 PM
Date Received: 7/14/2010 9:06:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/14/2010 1632 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/14/2010 1356 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/14/2010 1356 MS	EPA 200.8
Boron	0.5	0.1		mg/L	07/14/2010 1632 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/14/2010 1356 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/14/2010 1632 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/14/2010 1356 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/14/2010 1632 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/14/2010 1356 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/16/2010 515 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/14/2010 1356 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/14/2010 1632 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/14/2010 1356 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/14/2010 1356 MS	EPA 200.8
Uranium	0.046	0.001		mg/L	07/14/2010 1356 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/14/2010 1356 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/14/2010 1632 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/15/2010 2321 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/15/2010 2321 DG	EPA 200.7

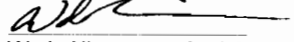
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-003
Client Sample ID: 34-18 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 8:15:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	11.98	s.u.			08/04/2010 2015	Field
Conductivity	2470	µm		hos/cm	08/04/2010 2015	Field
Dissolved Oxygen	N/A	mg		/L	08/04/2010 2015	Field
Dissolved Oxygen (pct)	N/A			%	08/04/2010 2015	Field
Turbidity	3.92	NT		U	08/04/2010 2015	Field
Temperature	14.1	°C			08/04/2010 2015	Field
Oxygen Reduction Potential (ORP)	+147	mV			08/04/2010 2015	Field
General Parameters						
pH	11.4	0.1		s.u.	08/06/2010 1813 KO	SM 4500 H B
Electrical Conductivity	2070	5		µmhos/cm	08/06/2010 1813 KO	SM 2510B
Total Dissolved Solids (180)	1060	10		mg/L	08/06/2010 1230 AMB	SM 2540
Solids, Total Dissolved (Calc)	990	10		mg/L	08/12/2010 746 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	484	5		mg/L	08/06/2010 1813 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.2	0.1		mg/L	08/18/2010 1058 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	08/06/2010 1813 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	189	5		mg/L	08/06/2010 1813 KO	SM 2320B
Chloride	4	1		mg/L	08/06/2010 1622 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	08/06/2010 1813 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/16/2010 1446 AS	EPA 353.2
Sulfate	304	1		mg/L	08/06/2010 1622 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	08/09/2010 934 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/09/2010 934 DG	EPA 200.7
Potassium	26	1		mg/L	08/09/2010 934 DG	EPA 200.7
Sodium	360	1		mg/L	08/09/2010 934 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-003
Client Sample ID: 34-18 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 8:15:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Carbonate as CO ₃	6.31	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Chloride	0.11	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sulfate	6.32	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Calcium	0.05	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Potassium	0.67	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sodium	15.66	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.40	0		meq/L	08/12/2010 746 KO	SM 1030E
Anion Sum	16.19	0		meq/L	08/12/2010 746 KO	SM 1030E
Cation-Anion Balance	0.63	0		%	08/12/2010 746 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	3.5		pCi/L	09/01/2010 000 SH	SM 7110B
Gross Beta	16.5 ± 4.2	6.8		pCi/L	09/01/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2327 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/10/2010 413 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/12/2010 919 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-003
Client Sample ID: 34-18 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 8:15:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/09/2010 934 DG	EPA 200.7
Arsenic	0.012	0.005		mg/L	08/06/2010 957 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/06/2010 957 MS	EPA 200.8
Boron	0.3	0.1		mg/L	08/09/2010 934 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/06/2010 957 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/09/2010 934 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/06/2010 957 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/09/2010 934 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/06/2010 957 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/10/2010 952 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/06/2010 957 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/09/2010 934 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/06/2010 957 MS	EPA 200.8
Silver	0.004	0.003		mg/L	08/06/2010 957 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/06/2010 957 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/06/2010 957 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/09/2010 934 DG	EPA 200.7
Total Metals						
Iron	0.11	0.05		mg/L	08/09/2010 1330 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/09/2010 1330 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-001
Client Sample ID: 34-7 DM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 12:45:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.52	s.u.			08/10/2010 1245	Field
Conductivity	3470	µm		hos/cm	08/10/2010 1245	Field
Dissolved Oxygen	6.70	mg		/L	08/10/2010 1245	Field
Dissolved Oxygen (pct)	67.9			%	08/10/2010 1245	Field
Turbidity	60.0	NT		U	08/10/2010 1245	Field
Temperature	15.7	°C			08/10/2010 1245	Field
Oxygen Reduction Potential (ORP)	-28	mV			08/10/2010 1245	Field
General Parameters						
pH	10.8	0.1		s.u.	08/13/2010 1344 KO	SM 4500 H B
Electrical Conductivity	3220	5		µmhos/cm	08/13/2010 1344 KO	SM 2510B
Total Dissolved Solids (180)	1900	10		mg/L	08/12/2010 1420 AMB	SM 2540
Solids, Total Dissolved (Calc)	1740	10		mg/L	08/26/2010 849 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	547	5		mg/L	08/13/2010 1344 KO	SM 2320B
Nitrogen, Ammonia (As N)	2.4	0.1		mg/L	08/25/2010 1448 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	ND	5		mg/L	08/13/2010 1344 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	312	5		mg/L	08/13/2010 1344 KO	SM 2320B
Chloride	539	1		mg/L	08/13/2010 1117 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	08/13/2010 1344 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/19/2010 1621 AS	EPA 353.2
Sulfate	146	1		mg/L	08/13/2010 1117 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	08/12/2010 1531 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/12/2010 1531 DG	EPA 200.7
Potassium	36	1		mg/L	08/12/2010 1531 DG	EPA 200.7
Sodium	688	1		mg/L	08/12/2010 1531 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-001
Client Sample ID: 34-7 DM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 12:45:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Carbonate as CO ₃	10.39	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Chloride	15.19	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sulfate	3.03	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Calcium	0.16	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Potassium	0.92	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sodium	29.91	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	31.01	0		meq/L	08/26/2010 849 KO	SM 1030E
Anion Sum	29.22	0		meq/L	08/26/2010 849 KO	SM 1030E
Cation-Anion Balance	2.96	0		%	08/26/2010 849 KO	SM 1030E
Radio Chemistry						
Gross Alpha	20.0 ± 4.5	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	28.0 ± 5.0	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1920 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.5 ± 0.1	0.2		pCi/L	09/17/2010 2003 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/19/2010 2327 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	1.0 ± 0.4	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/24/2010 1129 WN	ACW10
Thorium 230 (Suspended)	0.325 ± 0.089	0.2	L	pCi/L	09/24/2010 1129 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/20/2010 1022 MS	EPA 200.8

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-001
Client Sample ID: 34-7 DM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 12:45:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.1	0.1		mg/L	08/12/2010 1531 DG	EPA 200.7
Arsenic	0.008	0.005		mg/L	08/12/2010 1221 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1221 MS	EPA 200.8
Boron	0.8	0.1		mg/L	08/12/2010 1531 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1221 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1531 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1221 MS	EPA 200.8
Iron	0.08	0.05		mg/L	08/12/2010 1531 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1221 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/24/2010 723 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1221 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1531 DG	EPA 200.7
Selenium	0.016	0.005		mg/L	08/12/2010 1221 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1221 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/12/2010 1221 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1221 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1531 DG	EPA 200.7
Total Metals						
Iron	10.2	0.05		mg/L	08/12/2010 1913 DG	EPA 200.7
Manganese	0.15	0.02		mg/L	08/12/2010 1913 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007167001

Project: ROSS ISR
Lab ID: S1007167-001
Client Sample ID: 34-7OZ
COC: 131152

Work Order: S1007167
Collection Date: 7/8/2010 2:30:00 PM
Date Received: 7/13/2010 10:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.77	s.u.			07/08/2010 1430	Field
Conductivity	2880	µm		hos/cm	07/08/2010 1430	Field
Dissolved Oxygen	1.43	mg		/L	07/08/2010 1430	Field
Dissolved Oxygen (pct)	13.4			%	07/08/2010 1430	Field
Redox Potential	104	mV			07/08/2010 1430	Field
Turbidity	0.93	NT		U	07/08/2010 1430	Field
Temperature	12.5	°C			07/08/2010 1430	Field
General Parameters						
pH	8.4	0.1		s.u.	07/13/2010 1525 KO	SM 4500 H B
Electrical Conductivity	2250	5		µmhos/cm	07/13/2010 1525 KO	SM 2510B
Total Dissolved Solids (180)	1640	10		mg/L	07/13/2010 1535 AMB	SM 2540
Solids, Total Dissolved (Calc)	1460	10		mg/L	07/26/2010 920 KO	SM 1030E
Total Suspended Solids	ND	5	H	mg/L	08/11/2010 1355 AMB	SM 2540
Alkalinity, Total (As CaCO ₃)	556	5		mg/L	07/13/2010 1525 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	07/23/2010 1429 AS	EPA 350.1
Gross Alpha	56.8 ± 5.6	3.2		pCi/L	08/10/2010 838 SH	SM 7110B
Gross Beta	13.3 ± 3.8	6.8		pCi/L	08/10/2010 838 SH	SM 7110B
Radium 226 (Dissolved)	2.35 ± 0.19	0.2		pCi/L	08/16/2010 1348 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 2012 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/12/2010 331 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 1842 SH	OTW01
Lead 210 (Suspended)	1.44 ± 0.38	1		pCi/L	08/17/2010 1012 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 1818 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 1448 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/08/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/08/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/16/2010 1922 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	662	5		mg/L	07/13/2010 1525 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	8	5		mg/L	07/13/2010 1525 KO	SM 2320B
Chloride	4	1		mg/L	07/13/2010 1317 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	07/13/2010 1525 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/19/2010 1232 AS	EPA 353.2
Sulfate	563	1		mg/L	07/13/2010 1317 KO	EPA 300.0

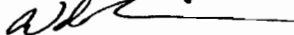
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007167001

Project: ROSS ISR
Lab ID: S1007167-001
Client Sample ID: 34-70Z
COC: 131152

Work Order: S1007167
Collection Date: 7/8/2010 2:30:00 PM
Date Received: 7/13/2010 10:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	6	1		mg/L	07/14/2010 1511 DG	EPA 200.7
Magnesium	3	1		mg/L	07/14/2010 1511 DG	EPA 200.7
Potassium	5	1		mg/L	07/14/2010 1511 DG	EPA 200.7
Sodium	546	1		mg/L	07/14/2010 1511 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.85	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Carbonate as CO ₃	0.27	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Chloride	0.12	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Sulfate	11.71	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Calcium	0.32	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Magnesium	0.20	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Potassium	0.13	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Sodium	23.75	0.01		meq/L	07/26/2010 920 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.42	0		meq/L	07/26/2010 920 KO	SM 1030E
Anion Sum	22.98	0		meq/L	07/26/2010 920 KO	SM 1030E
Cation-Anion Balance	3.04	0		%	07/26/2010 920 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007167001

Project: ROSS ISR
Lab ID: S1007167-001
Client Sample ID: 34-7OZ
COC: 131152

Work Order: S1007167
Collection Date: 7/8/2010 2:30:00 PM
Date Received: 7/13/2010 10:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/14/2010 1511 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/13/2010 1202 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/13/2010 1202 MS	EPA 200.8
Boron	0.4	0.1		mg/L	07/14/2010 1511 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/13/2010 1202 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/14/2010 1511 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/13/2010 1202 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/14/2010 1511 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/13/2010 1202 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/16/2010 508 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/13/2010 1202 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/14/2010 1511 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/13/2010 1202 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/13/2010 1202 MS	EPA 200.8
Uranium	0.044	0.001		mg/L	07/13/2010 1202 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/13/2010 1202 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/14/2010 1511 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/14/2010 1751 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/14/2010 1751 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-004
Client Sample ID: 34-7SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 3:50:00 PM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.38	s.u.			07/22/2010 1550	Field
Conductivity	1294	µm		hos/cm	07/22/2010 1550	Field
Dissolved Oxygen	3.63	mg		/L	07/22/2010 1550	Field
Dissolved Oxygen (pct)	41.2			%	07/22/2010 1550	Field
Redox Potential	+152	mV			07/22/2010 1550	Field
Turbidity	0.37	NT		U	07/22/2010 1550	Field
Temperature	15.9	°C			07/22/2010 1550	Field
Static Water Level	22.11	ft			07/22/2010 1550	Field
General Parameters						
pH	9.1	0.1		s.u.	07/23/2010 2338 LJK	SM 4500 H B
Electrical Conductivity	1270	5		µmhos/cm	07/23/2010 2338 LJK	SM 2510B
Total Dissolved Solids (180)	820	10		mg/L	07/23/2010 1005 MJH	SM 2540
Solids, Total Dissolved (Calc)	770	10		mg/L	07/27/2010 908 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	531	5		mg/L	07/23/2010 2338 LJK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2010 1107 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	513	5		mg/L	07/23/2010 2338 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	66	5		mg/L	07/23/2010 2338 LJK	SM 2320B
Chloride	2	1		mg/L	07/26/2010 1919 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	07/26/2010 1633 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1526 AS	EPA 353.2
Sulfate	137	1		mg/L	07/26/2010 1919 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	07/23/2010 1757 RS	EPA 200.7
Magnesium	2	1		mg/L	07/23/2010 1757 RS	EPA 200.7
Potassium	11	1		mg/L	07/23/2010 1757 RS	EPA 200.7
Sodium	299	1		mg/L	07/23/2010 1757 RS	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010
Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-004
Client Sample ID: 34-7SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 3:50:00 PM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.40	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Carbonate as CO ₃	2.20	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Chloride	0.06	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sulfate	2.85	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Calcium	0.11	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Magnesium	0.12	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Potassium	0.27	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Sodium	13.01	0.01		meq/L	07/27/2010 908 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	13.53	0		meq/L	07/27/2010 908 KO	SM 1030E
Anion Sum	13.55	0		meq/L	07/27/2010 908 KO	SM 1030E
Cation-Anion Balance	0.07	0		%	07/27/2010 908 KO	SM 1030E
Radio Chemistry						
Gross Alpha	2.65 ± 1.17	2		pCi/L	08/22/2010 1038 SH	SM 7110B
Gross Beta	7.27 ± 2.08	3.4		pCi/L	08/22/2010 1038 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/29/2010 1816 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 1851 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/26/2010 2301 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2106 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 1941 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1523 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1249 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1818 MS	EPA 200.8

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/2/2010

Report ID: S1007329002
(Replaces S1007329001)

Project: STRATA/ROSS/09142
Lab ID: S1007329-004
Client Sample ID: 34-7SA
COC: 131421

Work Order: S1007329
Collection Date: 7/22/2010 3:50:00 PM
Date Received: 7/23/2010 8:15:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1757 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1311 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1311 MS	EPA 200.8
Boron	0.3	0.1		mg/L	07/23/2010 1757 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1311 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1757 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1311 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/23/2010 1757 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1311 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 826 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1311 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1757 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/23/2010 1311 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1311 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/23/2010 1311 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1311 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/23/2010 1757 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/26/2010 2035 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/26/2010 2035 DG	EPA 200.7

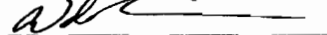
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-002
Client Sample ID: 34-7 SM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 12:55:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.23	s.u.			08/10/2010 1255	Field
Conductivity	2060	µm		hos/cm	08/10/2010 1255	Field
Dissolved Oxygen	6.84	mg		/L	08/10/2010 1255	Field
Dissolved Oxygen (pct)	69.0			%	08/10/2010 1255	Field
Turbidity	2.11	NT		U	08/10/2010 1255	Field
Temperature	13.1	°C			08/10/2010 1255	Field
Oxygen Reduction Potential (ORP)	+177	mV			08/10/2010 1255	Field
General Parameters						
pH	9.0	0.1		s.u.	08/13/2010 1355 KO	SM 4500 H B
Electrical Conductivity	1800	5		µmhos/cm	08/13/2010 1355 KO	SM 2510B
Total Dissolved Solids (180)	1240	10		mg/L	08/12/2010 1430 AMB	SM 2540
Solids, Total Dissolved (Calc)	1130	10		mg/L	08/26/2010 849 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	647	5		mg/L	08/13/2010 1355 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	08/25/2010 1449 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	674	5		mg/L	08/13/2010 1355 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	57	5		mg/L	08/13/2010 1355 KO	SM 2320B
Chloride	3	1		mg/L	08/13/2010 1128 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	08/13/2010 1355 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/19/2010 1622 AS	EPA 353.2
Sulfate	298	1		mg/L	08/13/2010 1128 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	08/19/2010 1833 DG	EPA 200.7
Magnesium	1	1		mg/L	08/19/2010 1833 DG	EPA 200.7
Potassium	10	1		mg/L	08/19/2010 1833 DG	EPA 200.7
Sodium	426	1		mg/L	08/19/2010 1833 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-002
Client Sample ID: 34-7 SM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 12:55:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.04	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Carbonate as CO ₃	1.88	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Chloride	0.07	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sulfate	6.20	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Calcium	0.08	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Potassium	0.25	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Sodium	18.53	0.01		meq/L	08/26/2010 849 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.98	0		meq/L	08/26/2010 849 KO	SM 1030E
Anion Sum	19.26	0		meq/L	08/26/2010 849 KO	SM 1030E
Cation-Anion Balance	0.74	0		%	08/26/2010 849 KO	SM 1030E
Radio Chemistry						
Gross Alpha	4.1 ± 2.4	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	5.8 ± 3.6	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1920 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/17/2010 2003 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/19/2010 2327 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/26/2010 1424 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/26/2010 1424 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/20/2010 1029 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008187001

Project: ROSS/STRATA/09142
Lab ID: S1008187-002
Client Sample ID: 34-7 SM
COC: 131427

Work Order: S1008187
Collection Date: 8/10/2010 12:55:00 PM
Date Received: 8/11/2010 2:16:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1534 DG	EPA 200.7
Arsenic	0.009	0.005		mg/L	08/12/2010 1501 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1501 MS	EPA 200.8
Boron	0.6	0.1		mg/L	08/12/2010 1534 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1501 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1534 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1501 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1534 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1501 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 841 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1501 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1534 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/12/2010 1501 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1501 MS	EPA 200.8
Uranium	0.002	0.001		mg/L	08/12/2010 1501 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1501 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1534 DG	EPA 200.7
Total Metals						
Iron	0.08	0.05		mg/L	08/12/2010 1918 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	08/12/2010 1918 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-001
Client Sample ID: 42-19 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 2:10:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.71	s.u.			08/04/2010 1410	Field
Conductivity	1970	µm		hos/cm	08/04/2010 1410	Field
Dissolved Oxygen	6.73	mg		/L	08/04/2010 1410	Field
Dissolved Oxygen (pct)	71.5			%	08/04/2010 1410	Field
Turbidity	11.67	NT		U	08/04/2010 1410	Field
Temperature	16.0	°C			08/04/2010 1410	Field
Oxygen Reduction Potential (ORP)	-42.0	mV			08/04/2010 1410	Field
General Parameters						
pH	9.6	0.1		s.u.	08/06/2010 1750 KO	SM 4500 H B
Electrical Conductivity	1920	5		µmhos/cm	08/06/2010 1750 KO	SM 2510B
Total Dissolved Solids (180)	1080	10		mg/L	08/06/2010 1220 AMB	SM 2540
Solids, Total Dissolved (Calc)	990	10		mg/L	08/12/2010 746 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	386	5		mg/L	08/06/2010 1750 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	08/18/2010 1051 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	282	5		mg/L	08/06/2010 1750 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	93	5		mg/L	08/06/2010 1750 KO	SM 2320B
Chloride	345	1		mg/L	08/06/2010 1602 KO	EPA 300.0
Fluoride	1.4	0.1		mg/L	08/06/2010 1750 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/16/2010 1444 AS	EPA 353.2
Sulfate	9	1		mg/L	08/06/2010 1602 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	08/09/2010 930 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/09/2010 930 DG	EPA 200.7
Potassium	11	1		mg/L	08/09/2010 930 DG	EPA 200.7
Sodium	390	1		mg/L	08/09/2010 930 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-001
Client Sample ID: 42-19 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 2:10:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	4.61	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Carbonate as CO ₃	3.10	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Chloride	9.73	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Fluoride	0.07	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sulfate	0.19	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Calcium	0.10	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Potassium	0.29	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sodium	16.96	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.36	0		meq/L	08/12/2010 746 KO	SM 1030E
Anion Sum	17.72	0		meq/L	08/12/2010 746 KO	SM 1030E
Cation-Anion Balance	1.03	0		%	08/12/2010 746 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	3.5		pCi/L	09/01/2010 808 SH	SM 7110B
Gross Beta	ND	6.8		pCi/L	09/01/2010 808 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2327 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/09/2010 2257 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/16/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/12/2010 910 MS	EPA 200.8

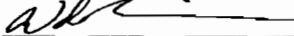
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-001
Client Sample ID: 42-19 DM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 2:10:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/09/2010 930 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	08/06/2010 942 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/06/2010 942 MS	EPA 200.8
Boron	0.7	0.1		mg/L	08/09/2010 930 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/06/2010 942 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/09/2010 930 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/06/2010 942 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/09/2010 930 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/06/2010 942 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/10/2010 948 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/06/2010 942 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/09/2010 930 DG	EPA 200.7
Selenium	0.012	0.005		mg/L	08/06/2010 942 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/06/2010 942 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/06/2010 942 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/06/2010 942 MS	EPA 200.8
Zinc	0.04	0.01		mg/L	08/09/2010 930 DG	EPA 200.7
Total Metals						
Iron	0.31	0.05		mg/L	08/09/2010 1325 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/09/2010 1325 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-003
Client Sample ID: 42-19OZ
COC: 131153

Work Order: S1007140
Collection Date: 7/10/2010 8:30:00 AM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.97	s.u.			07/10/2010 830	Field
Conductivity	2810	µm		hos/cm	07/10/2010 830	Field
Dissolved Oxygen	0.94	mg		/L	07/10/2010 830	Field
Dissolved Oxygen (pct)	8.9			%	07/10/2010 830	Field
Redox Potential	+119	mV			07/10/2010 830	Field
Turbidity	0.70	NT		U	07/10/2010 830	Field
Temperature	13.0	°C			07/10/2010 830	Field
General Parameters						
pH	8.7	0.1		s.u.	07/12/2010 1843 KO	SM 4500 H B
Electrical Conductivity	2200	5		µmhos/cm	07/12/2010 1843 KO	SM 2510B
Total Dissolved Solids (180)	1650	10		mg/L	07/12/2010 1700 AMB	SM 2540
Solids, Total Dissolved (Calc)	1450	10		mg/L	07/15/2010 1544 KO	SM 1030E
Total Suspended Solids	ND	5	H	mg/L	08/11/2010 1350 AMB	SM 2540
Alkalinity, Total (As CaCO ₃)	480	5		mg/L	07/12/2010 1843 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	07/23/2010 1432 AS	EPA 350.1
Gross Alpha	18.7 ± 3.5	3.2		pCi/L	08/10/2010 838 SH	SM 7110B
Gross Beta	8.54 ± 3.74	7		pCi/L	08/10/2010 838 SH	SM 7110B
Radium 226 (Dissolved)	1.46 ± 0.15	0.2		pCi/L	08/16/2010 1348 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 2012 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/17/2010 315 SH	Ra-05
Lead 210 (Dissolved)	1.40 ± 0.46	1		pCi/L	08/15/2010 1637 SH	OTW01
Lead 210 (Suspended)	1.86 ± 0.41	1		pCi/L	08/17/2010 520 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 1558 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 1236 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/08/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/08/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/16/2010 1918 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	543	5		mg/L	07/12/2010 1843 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	21	5		mg/L	07/12/2010 1843 KO	SM 2320B
Chloride	3	1		mg/L	07/12/2010 1824 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	07/12/2010 1843 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/23/2010 1210 AS	EPA 353.2
Sulfate	595	1		mg/L	07/12/2010 1824 KO	EPA 300.0

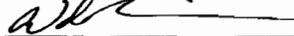
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-003
Client Sample ID: 42-19OZ
COC: 131153

Work Order: S1007140
Collection Date: 7/10/2010 8:30:00 AM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	6	1		mg/L	07/14/2010 2102 DG	EPA 200.7
Magnesium	2	1		mg/L	07/14/2010 2102 DG	EPA 200.7
Potassium	5	1		mg/L	07/12/2010 1755 DG	EPA 200.7
Sodium	547	1		mg/L	07/12/2010 1755 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.90	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Carbonate as CO ₃	0.69	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Chloride	0.09	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Sulfate	12.38	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Calcium	0.30	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Magnesium	0.19	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Potassium	0.12	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Sodium	23.79	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.40	0		meq/L	07/15/2010 1544 KO	SM 1030E
Anion Sum	22.09	0		meq/L	07/15/2010 1544 KO	SM 1030E
Cation-Anion Balance	4.96	0		%	07/15/2010 1544 KO	SM 1030E


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- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-003
Client Sample ID: 42-190Z
COC: 131153

Work Order: S1007140
Collection Date: 7/10/2010 8:30:00 AM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/12/2010 1755 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/12/2010 1420 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/12/2010 1420 MS	EPA 200.8
Boron	0.3	0.1		mg/L	07/12/2010 1755 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/12/2010 1420 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/12/2010 1755 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/12/2010 1420 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/12/2010 1755 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/12/2010 1420 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/16/2010 456 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/12/2010 1420 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/12/2010 1755 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/12/2010 1420 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/12/2010 1420 MS	EPA 200.8
Uranium	0.010	0.001		mg/L	07/12/2010 1420 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/12/2010 1420 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/12/2010 1755 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/13/2010 1918 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/13/2010 1918 DG	EPA 200.7


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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-002
Client Sample ID: 42-19 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 2:25:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.78	s.u.			08/04/2010 1425	Field
Conductivity	1642	µm		hos/cm	08/04/2010 1425	Field
Dissolved Oxygen	4.95	mg		/L	08/04/2010 1425	Field
Dissolved Oxygen (pct)	54.3			%	08/04/2010 1425	Field
Turbidity	6.39	NT		U	08/04/2010 1425	Field
Temperature	16.3	°C			08/04/2010 1425	Field
Oxygen Reduction Potential (ORP)	+188	mV			08/04/2010 1425	Field
General Parameters						
pH	10.6	0.1		s.u.	08/06/2010 1801 KO	SM 4500 H B
Electrical Conductivity	1580	5		µmhos/cm	08/06/2010 1801 KO	SM 2510B
Total Dissolved Solids (180)	990	10		mg/L	08/06/2010 1225 AMB	SM 2540
Solids, Total Dissolved (Calc)	910	10		mg/L	08/12/2010 746 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	303	5		mg/L	08/06/2010 1801 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.2	0.1		mg/L	08/20/2010 1008 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	12	5		mg/L	08/06/2010 1801 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	175	5		mg/L	08/06/2010 1801 KO	SM 2320B
Chloride	4	1		mg/L	08/06/2010 1612 KO	EPA 300.0
Fluoride	1.5	0.1		mg/L	08/06/2010 1801 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/16/2010 1445 AS	EPA 353.2
Sulfate	371	1		mg/L	08/06/2010 1612 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	08/09/2010 932 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/09/2010 932 DG	EPA 200.7
Potassium	10	1		mg/L	08/09/2010 932 DG	EPA 200.7
Sodium	342	1		mg/L	08/09/2010 932 DG	EPA 200.7

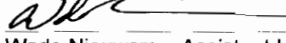
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Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-002
Client Sample ID: 42-19 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 2:25:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	0.20	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Carbonate as CO ₃	5.84	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Chloride	0.11	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Fluoride	0.07	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sulfate	7.73	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Calcium	0.05	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Potassium	0.25	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Sodium	14.87	0.01		meq/L	08/12/2010 746 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.18	0		meq/L	08/12/2010 746 KO	SM 1030E
Anion Sum	13.97	0		meq/L	08/12/2010 746 KO	SM 1030E
Cation-Anion Balance	4.13	0		%	08/12/2010 746 KO	SM 1030E
Radio Chemistry						
Gross Alpha	2.78 ± 2.19	3.5		pCi/L	09/01/2010 000 SH	SM 7110B
Gross Beta	6.90 ± 4.00	6.9		pCi/L	09/01/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	0.21 ± 0.08	0.2		pCi/L	09/10/2010 1709 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2327 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/09/2010 2257 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/30/2010 1532 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/16/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/16/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/12/2010 917 MS	EPA 200.8

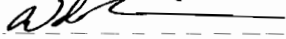
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RL - Reporting Limit

- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/1/2010
Report ID: S1008082001

Project: ROSS/STRATA/09142
Lab ID: S1008082-002
Client Sample ID: 42-19 SM
COC: 131428

Work Order: S1008082
Collection Date: 8/4/2010 2:25:00 PM
Date Received: 8/5/2010 3:41:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/09/2010 932 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/06/2010 953 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/06/2010 953 MS	EPA 200.8
Boron	0.4	0.1		mg/L	08/09/2010 932 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/06/2010 953 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/09/2010 932 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/06/2010 953 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/09/2010 932 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/06/2010 953 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/10/2010 950 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/06/2010 953 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/09/2010 932 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/06/2010 953 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/06/2010 953 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/06/2010 953 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/06/2010 953 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/09/2010 932 DG	EPA 200.7
Total Metals						
Iron	0.16	0.05		mg/L	08/09/2010 1328 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/09/2010 1328 DG	EPA 200.7


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RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-001
Client Sample ID: SA 43-18-1
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 11:25:00 AM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

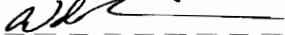
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.85	s.u.			07/14/2010 1125	Field
Conductivity	7540	µm		hos/cm	07/14/2010 1125	Field
Turbidity	457	NT		U	07/14/2010 1125	Field
Temperature	10.2	°C			07/14/2010 1125	Field
Static Water Level	20.82	ft			07/14/2010 1125	Field
General Parameters						
pH	8.0	0.1		s.u.	07/16/2010 1935 KO	SM 4500 H B
Electrical Conductivity	7050	5		µmhos/cm	07/16/2010 1935 KO	SM 2510B
Total Dissolved Solids (180)	6520	10		mg/L	07/19/2010 1050 MJH	SM 2540
Solids, Total Dissolved (Calc)	6400	10		mg/L	07/26/2010 857 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	453	5		mg/L	07/16/2010 1935 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	07/28/2010 1107 AS	EPA 350.1
Gross Alpha	81.7 ± 12.6	10		pCi/L	08/11/2010 922 SH	SM 7110B
Gross Beta	63.3 ± 11.2	17		pCi/L	08/11/2010 922 SH	SM 7110B
Radium 226 (Dissolved)	0.30 ± 0.07	0.2		pCi/L	08/16/2010 1557 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 2012 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/17/2010 315 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 1842 SH	OTW01
Lead 210 (Suspended)	4.10 ± 0.61	1		pCi/L	08/17/2010 1012 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 1818 SH	OTW01
Polonium 210 (Suspended)	2.09 ± 0.49	1		pCi/L	08/17/2010 1448 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/26/2010 1650 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	553	5		mg/L	07/16/2010 1935 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	07/16/2010 1935 KO	SM 2320B
Chloride	60	1		mg/L	07/22/2010 2229 LJK	EPA 300.0
Fluoride	0.3	0.1		mg/L	07/16/2010 1935 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	2.3	0.1		mg/L	07/29/2010 1514 AS	EPA 353.2
Sulfate	4190	1		mg/L	07/22/2010 2229 LJK	EPA 300.0

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B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-001
Client Sample ID: SA 43-18-1
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 11:25:00 AM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	339	1		mg/L	07/16/2010 1522 DG	EPA 200.7
Magnesium	181	1		mg/L	07/16/2010 1522 DG	EPA 200.7
Potassium	26	1		mg/L	07/16/2010 1522 DG	EPA 200.7
Sodium	1330	1		mg/L	07/16/2010 1522 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.06	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Chloride	1.67	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Sulfate	87.33	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Calcium	16.93	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Magnesium	14.92	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Potassium	0.66	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Sodium	57.68	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	90.21	0		meq/L	07/26/2010 857 KO	SM 1030E
Anion Sum	98.09	0		meq/L	07/26/2010 857 KO	SM 1030E
Cation-Anion Balance	4.18	0		%	07/26/2010 857 KO	SM 1030E

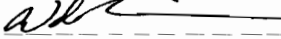
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-001
Client Sample ID: SA 43-18-1
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 11:25:00 AM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

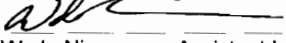
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/16/2010 1522 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/16/2010 1536 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/16/2010 1536 MS	EPA 200.8
Boron	0.3	0.1		mg/L	07/16/2010 1522 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/16/2010 1536 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/16/2010 1522 DG	EPA 200.7
Copper	0.01	0.01		mg/L	07/16/2010 1536 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/16/2010 1522 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/16/2010 1536 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/20/2010 1202 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/16/2010 1536 MS	EPA 200.8
Nickel	0.02	0.01		mg/L	07/16/2010 1522 DG	EPA 200.7
Selenium	0.050	0.005		mg/L	07/19/2010 1308 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/16/2010 1536 MS	EPA 200.8
Uranium	0.064	0.001		mg/L	07/16/2010 1536 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/16/2010 1536 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/16/2010 1522 DG	EPA 200.7
Total Metals						
Iron	4.52	0.05		mg/L	07/19/2010 1408 RS	EPA 200.7
Manganese	0.37	0.02		mg/L	07/19/2010 1408 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-002
Client Sample ID: SA 43-18-2
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 12:40:00 PM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.78	s.u.			07/14/2010 1240	Field
Conductivity	8550	µm		hos/cm	07/14/2010 1240	Field
Turbidity	883	NT		U	07/14/2010 1240	Field
Temperature	10.0	°C			07/14/2010 1240	Field
Static Water Level	11.02	ft			07/14/2010 1240	Field
General Parameters						
pH	8.0	0.1		s.u.	07/16/2010 1945 KO	SM 4500 H B
Electrical Conductivity	7850	5		µmhos/cm	07/16/2010 1945 KO	SM 2510B
Total Dissolved Solids (180)	7280	10		mg/L	07/19/2010 1100 MJH	SM 2540
Solids, Total Dissolved (Calc)	6710	10		mg/L	07/26/2010 857 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	589	5		mg/L	07/16/2010 1945 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	07/28/2010 1108 AS	EPA 350.1
Gross Alpha	218 ± 20	11		pCi/L	08/11/2010 922 SH	SM 7110B
Gross Beta	137 ± 13	18		pCi/L	08/11/2010 922 SH	SM 7110B
Radium 226 (Dissolved)	0.45 ± 0.08	0.2		pCi/L	08/16/2010 1557 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.86 ± 0.12	0.2		pCi/L	08/13/2010 2012 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/17/2010 315 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 1842 SH	OTW01
Lead 210 (Suspended)	2.33 ± 0.45	1		pCi/L	08/17/2010 1012 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 1818 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 1448 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/09/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/26/2010 1652 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	719	5		mg/L	07/16/2010 1945 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	07/16/2010 1945 KO	SM 2320B
Chloride	270	1		mg/L	07/22/2010 2333 LJK	EPA 300.0
Fluoride	0.6	0.1		mg/L	07/16/2010 1945 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	10.5	0.1		mg/L	07/29/2010 1515 AS	EPA 353.2
Sulfate	3950	1		mg/L	07/22/2010 2333 LJK	EPA 300.0


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-002
Client Sample ID: SA 43-18-2
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 12:40:00 PM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	325	1		mg/L	07/16/2010 1524 DG	EPA 200.7
Magnesium	264	1		mg/L	07/16/2010 1524 DG	EPA 200.7
Potassium	52	1		mg/L	07/16/2010 1524 DG	EPA 200.7
Sodium	1500	1		mg/L	07/16/2010 1524 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.78	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Chloride	7.60	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Sulfate	82.22	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Calcium	16.21	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Magnesium	21.72	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Potassium	1.32	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Sodium	65.27	0.01		meq/L	07/26/2010 857 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	104.54	0		meq/L	07/26/2010 857 KO	SM 1030E
Anion Sum	101.64	0		meq/L	07/26/2010 857 KO	SM 1030E
Cation-Anion Balance	1.40	0		%	07/26/2010 857 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

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- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S1007238001

Project: STRATA/ROSS/09142
Lab ID: S1007238-002
Client Sample ID: SA 43-18-2
COC: 131418

Work Order: S1007238
Collection Date: 7/14/2010 12:40:00 PM
Date Received: 7/15/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/16/2010 1524 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/16/2010 1539 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/16/2010 1539 MS	EPA 200.8
Boron	ND	0.1		mg/L	07/16/2010 1524 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/16/2010 1539 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/16/2010 1524 DG	EPA 200.7
Copper	0.02	0.01		mg/L	07/16/2010 1539 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/16/2010 1524 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/16/2010 1539 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/20/2010 1207 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/16/2010 1539 MS	EPA 200.8
Nickel	0.02	0.01		mg/L	07/16/2010 1524 DG	EPA 200.7
Selenium	0.955	0.005		mg/L	07/19/2010 1310 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/16/2010 1539 MS	EPA 200.8
Uranium	0.264	0.001		mg/L	07/16/2010 1539 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/16/2010 1539 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/16/2010 1524 DG	EPA 200.7
Total Metals						
Iron	19.0	0.05		mg/L	07/19/2010 1410 RS	EPA 200.7
Manganese	0.54	0.02		mg/L	07/19/2010 1410 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007188001

Project: STRATA/ROSS/09142
Lab ID: S1007188-002
Client Sample ID: SA 43-18-3
COC: 131417

Work Order: S1007188
Collection Date: 7/13/2010 10:05:00 AM
Date Received: 7/14/2010 9:06:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.78	s.u.			07/13/2010 1005	Field
Conductivity	814	µm		hos/cm	07/13/2010 1005	Field
Turbidity	52.6	NT		U	07/13/2010 1005	Field
Temperature	13.3	°C			07/13/2010 1005	Field
General Parameters						
pH	8.1	0.1		s.u.	07/14/2010 1741 KO	SM 4500 H B
Electrical Conductivity	708	5		µmhos/cm	07/14/2010 1741 KO	SM 2510B
Total Dissolved Solids (180)	430	10		mg/L	07/14/2010 1515 AMB	SM 2540
Solids, Total Dissolved (Calc)	430	10		mg/L	07/26/2010 919 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	342	5		mg/L	07/14/2010 1741 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/28/2010 1020 AS	EPA 350.1
Gross Alpha	8.44 ± 1.65	2		pCi/L	08/11/2010 922 SH	SM 7110B
Gross Beta	6.49 ± 2.06	3.4		pCi/L	08/11/2010 922 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/16/2010 1348 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 2012 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/17/2010 315 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 1842 SH	OTW01
Lead 210 (Suspended)	3.81 ± 0.51	1		pCi/L	08/17/2010 1012 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 1818 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 1448 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/16/2010 1929 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	417	5		mg/L	07/14/2010 1741 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	07/14/2010 1741 KO	SM 2320B
Chloride	ND	1		mg/L	07/14/2010 1700 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	07/14/2010 1741 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.4	0.1		mg/L	07/23/2010 1323 AS	EPA 353.2
Sulfate	53	1		mg/L	07/14/2010 1700 KO	EPA 300.0
Cations						
Calcium	18	1		mg/L	07/14/2010 1635 DG	EPA 200.7
Magnesium	12	1		mg/L	07/14/2010 1635 DG	EPA 200.7
Potassium	4	1		mg/L	07/14/2010 1635 DG	EPA 200.7
Sodium	133	1		mg/L	07/14/2010 1635 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007188001

Project: STRATA/ROSS/09142
Lab ID: S1007188-002
Client Sample ID: SA 43-18-3
COC: 131417

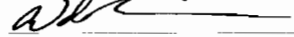
Work Order: S1007188
Collection Date: 7/13/2010 10:05:00 AM
Date Received: 7/14/2010 9:06:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.84	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Chloride	ND	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Nitrate + Nitrite as N	0.02	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Sulfate	1.09	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Calcium	0.90	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Magnesium	0.99	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Potassium	0.09	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Sodium	5.77	0.01		meq/L	07/26/2010 919 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	7.76	0		meq/L	07/26/2010 919 KO	SM 1030E
Anion Sum	8.01	0		meq/L	07/26/2010 919 KO	SM 1030E
Cation-Anion Balance	1.56	0		%	07/26/2010 919 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/14/2010 1635 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/14/2010 1359 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/14/2010 1359 MS	EPA 200.8
Boron	0.1	0.1		mg/L	07/14/2010 1635 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/14/2010 1359 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/14/2010 1635 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/14/2010 1359 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/14/2010 1635 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/14/2010 1359 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/16/2010 523 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/14/2010 1359 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/14/2010 1635 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/14/2010 1359 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/14/2010 1359 MS	EPA 200.8
Uranium	0.011	0.001		mg/L	07/14/2010 1359 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/14/2010 1359 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/14/2010 1635 DG	EPA 200.7
Total Metals						
Iron	0.80	0.05		mg/L	07/15/2010 2326 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	07/15/2010 2326 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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SAMPLING INFORMATION

Sampling Point 12-18 Dm Project ROSS / STRATA
 Location 44.58163 / -104.96337 W.O.# 2009142
 Sample ID# 12-18 Dm Date Sampled 10 / 6 / 10 Time 1655 am pm
 Describe Sampling Point _____

Well Depth 1040 ft below MP Depth to Water (below MP) 17591 ft Casing Diameter 5 in
 Date 10 / 6 / 10 Time 1320 am pm Casing Volume 464 ¹³⁹² ga

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump DEDICATED
 Tap Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples yes or no)
 and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

5.5 gpm
 x 0.00223
 cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1450	9.83	2450	15.2	—	3.37	303.11	495	
1500	9.97	2420	15.6	—	1.41	315.18	990	
1650	9.85	2420	15.9	-120	2.43	332.17	1485	

Pumping Start Time 1320 WL 175.91 Pumping End Time 1655 WL 332.17

Comments: _____

DO = 67.8% 6.55 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-1802 Project ROSS/STRATA
Location 44.581631-104.96337 W.O.# 2009142
Sample ID# 12-1802 Date Sampled 10/6/10 Time 1315 am pm
Describe Sampling Point _____

Well Depth 600 ft below MP Depth to Water (below MP) 1109.31 ft Casing Diameter 5 in
Date 10/6/10 Time 0845 am pm Casing Volume 431 ¹²⁹² ga

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

5.5 gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1030 0430	<u>8.25</u>	<u>1989</u>	<u>13.3</u>	<u>-</u>	<u>1.12</u>	<u>183.51</u>	<u>440</u>	<u>5.5</u>
<u>1150</u>	<u>8.47</u>	<u>1913</u>	<u>13.7</u>	<u>-</u>	<u>0.42</u>	<u>185.07</u>	<u>880</u>	<u>↓</u>
<u>1310</u>	<u>8.44</u>	<u>1934</u>	<u>14.0</u>	<u>+77</u>	<u>0.13</u>	<u>185.49</u>	<u>1320</u>	<u>↓</u>

Pumping Start Time 0910 WL 169.31 Pumping End Time 185.49 WL 135

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 62.206 6.11mg/L

PUMPED WITH NO DEFLATE

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-18 SA Project ROSS/STRATA
Location 44.58154/-104.96331 W.O.# 2009142
Sample ID# 12-18 SA Date Sampled 10/4/10 Time 1400 am pm
Describe Sampling Point _____

Well Depth 115 ft below MP Depth to Water (below MP) 418.00 ft Casing Diameter 5 in
Date 10/4/10 Time 1305 am pm Casing Volume N/A gal

At least N/A bore volumes have been evacuated before sampling

Sampling method Submersible pump XBLADDER/LOW FLOW
Tap Bailer _____

Pump intake or bailer set at 110 ft below MP.

Tubing (type: PLASTIC). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1330	7.79	957	18.1	—	8.41	50.19	3.0	150 ml/30 sec
1335	7.90	949	17.5	—	8.72	50.35	3.5	↓
1340	7.97	945	17.6	—	8.81	50.47	4.0	↓
1345	8.03	942	17.6	-185	8.54	50.55	4.5	↓

Pumping Start Time 1310 WL 47.42 Pumping End Time 1400 WL 52.31

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DD = 21.7% / 2.01 mg/L

Form completed by: J. Rogers

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 12-18 SM Project ROSS / STRATA
Location 44.581631 - 104.96337 W.O.# 2009142
Sample ID# 12-18 SM Date Sampled 10 / 6 / 10 Time 1655 am pm
Describe Sampling Point _____

Well Depth 370 ft below MP Depth to Water (below MP) 91.12 ft Casing Diameter 5 in
Date 10 / 6 / 10 Time 1320 am pm Casing Volume 837 gal
279 l

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples yes or no)

and all field measurements yes or no). Tubing used only for N/A

DISCHARGE RATE

2.5 gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1450	9.15	1659	13.1	—	0.46	110.27		
1520	8.88	1641	13.5	—	0.39	118.88		
1650	8.98	1642	13.3	+26	0.57	127.29		

Pumping Start Time 1320 WL 91.12 Pumping End Time 1655 WL 127.29

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 53% 5.16 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18 DM Project Ross/ISR
Location 44.57447 / -104.96027 W.O.# 2009142
Sample ID# 14-18 DM Date Sampled 10/12/10 Time 1600 am ☒ pm
Describe Sampling Point _____

Well Depth 600 ft below MP Depth to Water (below MP) 156.48 ft Casing Diameter 5 in
Date 10/12/10 Time 1230 am ☒ pm Casing Volume 1332 gal
444 l

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump
DEDICATED
Tap Bailer

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (☒ yes or no)
and all field measurements (☒ yes or no). Tubing used only for N/A

DISCHARGE RATE

8 gpm
x 0.00223
cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1355	9.11	2450	12.5	—	1.49	369.56	480	8
1455	9.21	2420	12.6	—	5.63	492.45	960	
1555	9.32	2410	12.6	+10	3.31	498.28	1440	

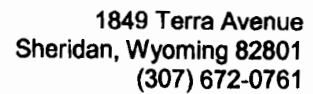
Pumping Start Time 1255 WL 156.48 Pumping End Time 1600 WL 498.28

Comments: SAMPLES ICED. INSTRUMENTS CALIBRATED

DO: 55.7 % 5.91 mg/L

Form completed by: J. ROGERS

Witnessed by: _____



Sampling Point 14-18 02 Project ROSS / STRATA
Location 44.57447 / -104.96027 W.O.# 2009142
Sample ID# 14-18 02 Date Sampled 10 11 2010 Time 1205 am pm
Describe Sampling Point _____

Well Depth 527 ft below MP Depth to Water (below MP) 152.45 ft Casing Diameter 5 in
Date 10' 12' 10 Time 0840 am pm Casing Volume 375 ⁽¹¹²⁵⁾ gal

Sampling method ' Submersible pump ' _____
' Tap ' Bailer **DEDICATED**

DISCHARGE RATE
_____ gpm
x 0.00223
_____ cfs

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

Time	PH (units)	Temperature Corrected Conductance (μ mhos/cm)	Temperature ($^{\circ}$ C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1135	8.15	3090	11.8	-	7.56	358.48	780	12 gpm
1205	8.75	3070	11.9	+16	14.08	363.12	1140	
DO= 26.9% / 2.89 mg/L								

Comments: SAMPLES (CED, INSTRUMENTS) CALIBRATED
PERFORMED SPECIAL SAMPLING PROTOCOL FOR 1ST HOUR OF SAMPLING
WITH R. FULLER. MAX FLOW/TSS SAMPLES

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18SA Project ROSS/STRATA
Location 44.57457/-104.95998 W.O.# 2009142
Sample ID# 14-18SA Date Sampled 10/4/10 Time 1130 am pm
Describe Sampling Point _____

Well Depth 70 ft below MP Depth to Water (below MP) 23.79 ft Casing Diameter 8.5 in
Date 10/4/10 Time 1015 am pm Casing Volume N/A gal

At least N/A bore volumes have been evacuated before sampling

Sampling method Submersible pump XBLADDER/LOW FLOW
Tap Bailer _____

Pump intake or bailer set at 65 ft below MP.

Tubing (type: PLASTIC). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1055	7.64	2180	17.1	-	3.30	24.20	3.0	150 mL/30 SEC
1100	8.18	2060	16.2	-	3.94	24.18	3.5	
1105	8.25	2030	16.1	-	3.69	24.18	4.0	
1110	8.27	2030	16.0	-122	3.29	24.20	4.5	

Pumping Start Time 1030 WL 23.57 Pumping End Time 1130 WL 24.02

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DD = 26.0% / 2.46 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 14-18 SM Project ROSS / ISR
Location 44.57447 / -104.96027 W.O.# 2009142
Sample ID# 14-18 SM Date Sampled 10 / 21 / 10 Time 1645 am (pm)
Describe Sampling Point _____

Well Depth 285 ft below MP Depth to Water (below MP) 16.90 ft Casing Diameter 5 in
Date 10 / 21 / 10 Time 1230 am (pm) Casing Volume 218 ⁶⁵⁴ gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' DISCONTINUED
' Tap ' Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

3 gpm
x 0.00223
cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1410	9.22	1783	11.7	-	3.72	76.06	225	3
1525	9.28	1770	11.7	-	0.98	77.13	450	
1640	9.17	1781	11.6	+131	0.05	77.56	675	

Pumping Start Time 1255 WL 166.90 Pumping End Time 1645 WL 77.56
Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 51.6% 5.61 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19 DM Project ROSS/STRATA
 Location 44.56992/-104.95750 W.O.# 2809142
 Sample ID# 21-19 DM Date Sampled 10/14/10 Time 1230 am pm
 Describe Sampling Point _____

Well Depth 580 ft below MP Depth to Water (below MP) 196.12 ft Casing Diameter 5 in
 Date 10/14/10 Time 0915 am pm Casing Volume 1157 ga
384 l

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE	
	gpm
x <u>0.00223</u>	cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1030	9.25	2380	14.4	-	2.55	274.60		
1130	9.42	2390	15.1	-	7.79	273.43		
1230	9.31	2390	14.8	-31	4.20	291.05		

Pumping Start Time 0930 WL 196.12 Pumping End Time 1230 WL _____

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

PUMPING AT 2 GPM & SWL IS DROPPING - UNABLE TO PULL 3 CASING VOLUMES

DO = 166.2% 6.76 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point ~~44.56995/-104.95767~~ 21-1902 Project ROSS / STRATA
Location 44.56995/-104.95767 W.O.# 2009142
Sample ID# 21-1902 Date Sampled 10 / 11 / 10 Time 1630 am ☒ pm
Describe Sampling Point _____

Well Depth 467 ft below MP Depth to Water (below MP) ~~1330~~ 208.04 ft Casing Diameter 5 in
Date 10 / 11 / 10 Time 1320 am ☐ pm ☒ Casing Volume 777 gal
259 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump
Tap _____ Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (☒ yes or no)
and all field measurements (☒ yes or no). Tubing used only for N/A

DISCHARGE RATE

5 gpm
x 0.00223
cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1430	8.49	2580	12.9	—	3.67	227.63	300	
1530	8.51	2630	13.0	—	1.15	234.80	600	
1630	8.60	2620	12.5	-31	1.0	259.25	900	

Pumping Start Time 1330 WL 208.04 Pumping End Time _____ WL _____

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 25.9% / 2.55 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19SA Project ROSS/STRATA
Location 44.57019/-104.95759 W.O.# 2009142
Sample ID# 21-19SA Date Sampled 10/4/10 Time 1245 am ☒ pm
Describe Sampling Point _____

Well Depth 30 ft below MP Depth to Water (below MP) 11.52 ft Casing Diameter 5 in
Date 10/4/10 Time 1145 am pm Casing Volume N/A gal

At least N/A bore volumes have been evacuated before sampling

Sampling method Submersible pump X-BLADDER/LOW FLOW
Tap Bailer _____

Pump intake or bailer set at 25 ft below MP.

Tubing (type: PLASTIC). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1215	7.99	1128	20.0	-	15.18	11.75	3.0	150ml/30sec
1220	8.28	1093	19.4	-	14.56	11.74	3.5	
1225	8.35	1090	19.7	-	12.76	11.77	4.0	
1230	8.22	1084	19.6	-67	13.07	11.78	4.5	↓

Pumping Start Time 1155 WL 11.24 Pumping End Time 1245 WL 11.79

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 29.3% / 2.87 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 21-19 SM Project ROSS / STRATA
 Location 44.569921 - 104.95750 W.O.# 2009140
 Sample ID# 21-19 SM Date Sampled 10 11 10 Time 1230 am ☒ pm
 Describe Sampling Point _____

Well Depth 320 ft below MP Depth to Water (below MP) 85.18 ft Casing Diameter 5 in
 Date 10 11 10 Time 0915 ☒ am ☐ pm Casing Volume 235 ⁷⁰⁵ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method Submersible pump
☐ Tap ☐ Bailer DEDICATED

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (☒ yes or no)
 and all field measurements (☒ yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1030	9.70	2320	11.5	—	6.87	97.64	240	4
1130	9.91	2220	12.1	—	0.86	98.69	480	4
1230	9.85	2190	12.4	+137	0.49	100.23	720	4

Pumping Start Time 0930 WL 85.18 Pumping End Time 1230 WL _____
 Comments: SAMPLES 1060, INSTRUMENTS CALIBRATED

DO = 35.6% / 3.77 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 DM Project ROSS / STRATA
 Location 44.57134 / -104.95071 W.O.# 0009142
 Sample ID# 34-18 DM Date Sampled 10 / 11 / 10 Time 1235 am pm
 Describe Sampling Point _____

Well Depth 640 ft below MP Depth to Water (below MP) 273.63 ft
 Date 1 / 1 Time 1000 am pm Casing Diameter 5 in
 Casing Volume 337 ¹⁰¹¹ gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

8 gpm
 x 0.00223
 cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1105	7.89	2590	13.60	—	1.87	383.80	360	8
1150	8.46	2560	14.7	—	3.83	412.71	720	↓
1235	9.29	2540	14.7	-70	2.00	436.39	1080	✓

Pumping Start Time 1020 WL 273.63 Pumping End Time _____ WL _____

Comments: _____

DO = 12.0% / 1.18 mg/L

Form completed by: J. Roars Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-18 02 Project ROSS/STRATA
 Location 44.571401-104.95080 W.O.# 2009142
 Sample ID# 34-18 02 Date Sampled 10 / 7 / 10 Time 1100 am pm
 Describe Sampling Point _____

Well Depth 570 ft below MP Depth to Water (below MP) 278.20 ft Casing Diameter 5 in
 Date 10 / 7 / 10 Time 0810 am pm Casing Volume 876 ga
292 l

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump
 Tap DEDICATED Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

5.5 gpm
 x 0.00223
 cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1000	8.44	2520	13.1	—	1.48	304.12	550	5.5
1030	8.55	2490	13.1	—	1.23	316.42	715	↓
1100	8.62	2510	13.2	-62	1.57	315.22	880	↓

Pumping Start Time 0820 WL 278.20 Pumping End Time 1105 WL 315.22
 Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 31.8% 3.26 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-185A Project Ross - 1SR
 Location 44.57144/-104.95078 W.O.# 2009142
 Sample ID# _____ Date Sampled 9/22/10 Time 1245 am pm
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) DRY ft Casing Diameter _____ in
 Date ____/____/____ Time ____ am ____ pm Casing Volume _____ ga
 l

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)

and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: _____

Form completed by: _____ Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 341-18 SM Project ROSS/ STRATA
Location 441.5134/-104.95071 W.O.# 2009142
Sample ID# 341-18 SM Date Sampled 10 / 11 / 10 Time 1305 am ☒ pm
Describe Sampling Point _____

Well Depth 307 ft below MP Depth to Water (below MP) 136.11 ft
Date 10 / 11 / 10 Time 1000 am ☒ pm Casing Diameter 5 in
Casing Volume 513 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

3.2 gpm
x 0.00223
cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1115							176	
1210							352	
1305	10.91	2040	11.6	-166	6.19		528	

Pumping Start Time 1020 WL 136.11 Pumping End Time _____ WL _____

Comments: WELL PUMPED DRY AT 1105 - 222.17'

DOZ 69.5 % 7.37 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7 DM Project ROSS/STRATA
Location 44.58733/-104.94740 W.O.# 2009142
Sample ID# 34-7 DM Date Sampled 10 / 13 / 10 Time 1500 am pm
Describe Sampling Point _____

Well Depth 472 ft below MP Depth to Water (below MP) 89.42 ft Casing Diameter 5 in
Date 10 / 13 / 10 Time 1100 am pm Casing Volume 383 ¹¹⁴⁹ gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer DEDICATED

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

5 gpm
x 0.00223
cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1220	10.20	3390	13.0	—	416	236.03	400	5
1340	10.18	3380	13.5	—	210	389.79	800	↓
1500	10.24	3430	14.3	+21	169.6	417.19	1200	↓

Pumping Start Time 1100 WL 89.42 Pumping End Time _____ WL _____

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 77.8% 7.92 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-70Z Project ROSS/STRATA
Location 44.58733/-104.94740 W.O.# 2009142
Sample ID# 34-70Z Date Sampled 10/13/10 Time 1045 am pm
Describe Sampling Point _____

Well Depth 380 ft below MP Depth to Water (below MP) 84.02 ft Casing Diameter 5 in
Date 10/13/10 Time 0915 am pm Casing Volume 296 888 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump DEDICATED
Tap _____ Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>0915</u>	<u>8.56</u>	<u>2440</u>	<u>11.4</u>	<u>—</u>	<u>0.24</u>	<u>102.00</u>	<u>312</u>	<u>12.5</u>
<u>1020</u>	<u>8.73</u>	<u>2420</u>	<u>11.6</u>	<u>—</u>	<u>0.48</u>	<u>102.61</u>	<u>624</u>	
<u>1045</u>	<u>8.85</u>	<u>2430</u>	<u>11.6</u>	<u>+195</u>	<u>0.21</u>	<u>102.72</u>	<u>936</u>	

Pumping Start Time 0930 WL 84.02 Pumping End Time 1045 WL 102.72

Comments: SAMPLES 1 CRO, INSTRUMENTS CALIBRATED

DO = 34.0% 3.75 mg/L

Form completed by: J. Rogers Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7SA Project ROSS/STRATA
Location 44.58738/-104.94719 W.O.# 2009142
Sample ID# 34-7SA Date Sampled 10/4/10 Time 1510 am pm
Describe Sampling Point _____

Well Depth 60 ft below MP Depth to Water (below MP) 22.33 ft Casing Diameter 5 in
Date 10/4/10 Time 1415 am pm Casing Volume N/A gal

At least N/A bore volumes have been evacuated before sampling

Sampling method ' Submersible pump X BLADDER/LOW FLOW
' Tap ' Bailer _____

Pump intake or bailer set at 55 ft below MP.

Tubing (type: PLASTIC). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1440	10.24	1347	20.0	-	6.93	23.61	3.0	150 mL/30 SEC
1445	10.27	1358	19.0	-	6.71	23.64	3.5	
1450	10.31	1351	18.8	-	6.51	23.71	4.0	
1455	10.30	1348	18.7	+193	6.67	23.75	4.5	

Pumping Start Time 1420 WL 22.09 Pumping End Time 1510 WL 24.02

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 36.8% 3.10 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 34-7 sm Project ROSS / STRATA
 Location 44.58733/-104.94740 W.O.# 2009147
 Sample ID# 34.7 02 Date Sampled 10 / 13 / 10 Time 1430 am ☒ pm
 Describe Sampling Point _____

Well Depth 240 ft below MP Depth to Water (below MP) 56.18 ft Casing Diameter 5 in
 Date 10 / 13 / 10 Time 1100 ☒ am ☐ pm Casing Volume 134 ⁴⁰² ga

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____ DEDICATED

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples ☒ yes or no)
 and all field measurements ☒ yes or no). Tubing used only for N/A

DISCHARGE RATE

2 gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1210	9.05	2050	12.1	—	2.31	80.47	140	2
1320	9.14	2060	12.7	—	2.10	81.07	280	↓
1430	9.04	2080	12.8	+174	1.93	81.50	420	↓

Pumping Start Time 1100 WL 56.18 Pumping End Time _____ WL _____

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 53.4% / 5.38 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 DM Project ROSS / STRATA
Location 44.56437 / -104.94840 W.O.# 2009142
Sample ID# 42-19 DM Date Sampled 10 / 5 / 10 Time 1735 am pm
Describe Sampling Point _____

Well Depth 610 ft below MP Depth to Water (below MP) 287.90 ft Casing Diameter 5 in
Date 10 / 5 / 10 Time 0815 am pm Casing Volume 322 ⁽⁹⁶⁶⁾ gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1545	9.40	2270	20.7	—	2.88	321.79		
1635	9.41	2260	15.4	—	2.32	349.38		
1730	9.47	2260	14.5	-11	2.26	412.22		

Pumping Start Time 1445 WL 287.90 Pumping End Time 1735 WL _____

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 74.8% 7.32 mg/L

Form completed by: J. ROGERS Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 02 Project ROSS/STRATA
Location 44.56437 / -104.94840 W.O.# 2009142
Sample ID# 42-19 02 Date Sampled 10 / 5 / 10 Time 1435 am pm
Describe Sampling Point _____

Well Depth 550 ft below MP Depth to Water (below MP) 300.62 ft Casing Diameter 5 in
Date 10 / 5 / 10 Time 0815 am pm Casing Volume 250 ⁽¹⁵⁰⁾ gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

2.24 gpm
x 0.00223
cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1030	8.34	2280	13.6	—	1.92	340.38	250	2.24
1230	8.37	2390	14.2	—	0.70	338.82	519	↓
1430	8.50	2410	14.4	+257	0.50	334.87	788	↓

Pumping Start Time 0838 WL 300.62 Pumping End Time 1435 WL 334.87

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 26.20% 2.60mg/L

USED 2.0 GPM DOLE VALVE

Form completed by: J. Roads

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point 42-19 SM Project ROSS/STRATA
Location 44.56437/-104.94840 W.O.# 2009142
Sample ID# 42-19 SM Date Sampled 10/5/10 Time 11055 am pm
Describe Sampling Point _____

Well Depth 285 ft below MP Depth to Water (below MP) 155.55 ft Casing Diameter 5 in
Date 10/5/10 Time 0815 am pm Casing Volume (388.5) gal
129.5 l

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1525	10.58	1863	14.7	-	3.62	196.88		
1605	10.55	1848	15.1	-	3.52	199.42		
1650	10.69	1839	15.4	+220	2.93	200.20		

Pumping Start Time 1445 WL 155.55 Pumping End Time 1655 WL 200.20

Comments: SAMPLING, INSTRUMENTS CALIBRATED

DO = 73.8% / 2.06 mg/L

2.0 GPM DALE VALVE INSTALLED

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point ~~Y~~ SA13-17-1 Project ROSS - ISR
 Location 44.57628/-104.94242 W.O.# _____
 Sample ID# _____ Date Sampled 9/22/10 Time 1210 am ☒ pm
 Describe Sampling Point _____

Well Depth _____ ft below MP Depth to Water (below MP) DRY ft Casing Diameter _____ in
 Date ____/____/____ Time ____ am ____ pm Casing Volume _____ gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
 ' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: _____). (New or previously used) was used to collect all samples (yes or no)
 and all field measurements (yes or no). Tubing used only for _____

DISCHARGE RATE

_____ gpm
 x 0.00223
 _____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)

Pumping Start Time _____ WL _____ Pumping End Time _____ WL _____

Comments: _____

Form completed by: _____ Witnessed by: _____

SAMPLING INFORMATION

Sampling Point SA 43-18-1 Project Ross ISR
Location 44.57623 / -104.94808 W.O.# 2009142
Sample ID# SA43-18-1 Date Sampled 9/22/10 Time 1050 am pm
Describe Sampling Point _____

Well Depth 30 ft below MP Depth to Water (below MP) 20.64 ft Casing Diameter 2 in
Date 9/22/10 Time 1000 am pm Casing Volume 1.53 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1015	7.59	7580	9.3		456	22.30	1.75	
1025	7.61	7540	9.2		600	23.71	3.5	
1035	7.77	7580	9.1	+223	604	24.55	5.25	

Pumping Start Time 1005 WL 20.64 Pumping End Time 1050 WL 24.51

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 53% 6.03 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point SA 43-18-2 Project ROSS ISR
Location 44.5741801-104.94612 W.O.# 2009142
Sample ID# SA 43-18-2 Date Sampled 9 / 22 / 10 Time 1155 am pm
Describe Sampling Point _____

Well Depth 20 ft below MP Depth to Water (below MP) 12.38 ft Casing Diameter 2 in
Date 9 / 22 / 10 Time 1105 am pm Casing Volume 1.24 gal

At least _____ bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at N/A ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1125	7.82	5650	10.5		323	13.22	1.5	
1135	7.87	5620	10.2		622	15.97	3.0	
1145	7.79	5630	10.0	+141	OR	17.71	4.5	

Pumping Start Time 1115 WL 12.38 Pumping End Time 1159 WL 19.44

Comments: SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 51.2% / 5.71 mg/L

Form completed by: J. ROGERS

Witnessed by: _____

SAMPLING INFORMATION

Sampling Point SA43-18-3 Project ROSS - 1SR
Location 44.57822/-104.94560 W.O.# 2009142
Sample ID# SA43-18-3 Date Sampled 9/22/10 Time 8945 am pm
Describe Sampling Point _____

Well Depth 24 ft below MP Depth to Water (below MP) 16.10 ft Casing Diameter 2 in
Date 9/22/10 Time 0950 am pm Casing Volume 1.29 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' _____
' Tap ' Bailer _____

Pump intake or bailer set at _____ ft below MP.

Tubing (type: N/A). (New or previously used) was used to collect all samples (yes or no)
and all field measurements (yes or no). Tubing used only for N/A

DISCHARGE RATE

_____ gpm
x 0.00223
_____ cfs

EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temperature (°C)	ORP	Turbidity (NTU)	Water Level (nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
0905	7.49	753	9.3		93.0	16.22	1.5	
0915	7.68	765	9.0		148	16.36	3.0	
0930	7.89	754	9.1	+255	210	16.51	4.5	

Pumping Start Time 0955 WL 16.10 Pumping End Time 0950 WL 16.20

Comments: REMOVED TRANSDUCER AT 0850 REPLACED AT 0950

SAMPLES ICED, INSTRUMENTS CALIBRATED

DO = 24.9 % 2.67 mg/L

Form completed by: J. ROGERS Witnessed by: _____



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-003
Client Sample ID: 12-18 DM
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 4:55:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.85	s.u.			10/06/2010 1655	Field
Conductivity	2420	µm		hos/cm	10/06/2010 1655	Field
Dissolved Oxygen	6.55	mg		/L	10/06/2010 1655	Field
Dissolved Oxygen (pct)	67.8			%	10/06/2010 1655	Field
Redox Potential	-106	mV			10/06/2010 1655	Field
Turbidity	2.43	NT		U	10/06/2010 1655	Field
Temperature	15.9	°C			10/06/2010 1655	Field
Static Water Level	175.91	ft			10/06/2010 1655	Field
General Parameters						
pH	9.7	0.1		s.u.	10/08/2010 2116 KO	SM 4500 H B
Electrical Conductivity	2180	5		µmhos/cm	10/08/2010 2116 KO	SM 2510B
Total Dissolved Solids (180)	1240	10		mg/L	10/08/2010 1740 JF	SM 2540
Solids, Total Dissolved (Calc)	1170	10		mg/L	10/18/2010 1544 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	411	5		mg/L	10/08/2010 2116 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/15/2010 1602 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	256	5		mg/L	10/08/2010 2116 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	121	5		mg/L	10/08/2010 2116 KO	SM 2320B
Chloride	402	1		mg/L	10/08/2010 1548 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	10/08/2010 2116 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1543 AS	EPA 353.2
Sulfate	28	1		mg/L	10/08/2010 1548 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	10/08/2010 1239 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/08/2010 1239 DG	EPA 200.7
Potassium	16	1		mg/L	10/08/2010 1239 DG	EPA 200.7
Sodium	476	1		mg/L	10/08/2010 1239 DG	EPA 200.7

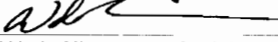
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-003
Client Sample ID: 12-18 DM
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 4:55:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	4.19	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Carbonate as CO ₃	4.02	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Chloride	11.34	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sulfate	0.57	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Calcium	0.05	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Magnesium	ND	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Potassium	0.40	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sodium	20.68	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.14	0		meq/L	10/18/2010 1544 KO	SM 1030E
Anion Sum	20.19	0		meq/L	10/18/2010 1544 KO	SM 1030E
Cation-Anion Balance	2.30	0		%	10/18/2010 1544 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	11.8 ± 4.1	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2		pCi/L	10/27/2010 2346 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/24/2010 1800 TWP	Ga-Tech


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 8 of 12



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-003
Client Sample ID: 12-18 DM
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 4:55:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.1	0.1		mg/L	10/08/2010 1239 DG	EPA 200.7
Arsenic	0.005	0.005		mg/L	10/08/2010 1133 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/08/2010 1133 MS	EPA 200.8
Boron	0.7	0.1		mg/L	10/08/2010 1239 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/08/2010 1133 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1239 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/08/2010 1133 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1239 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/08/2010 1133 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 955 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/08/2010 1133 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1239 DG	EPA 200.7
Selenium	0.008	0.005		mg/L	10/08/2010 1133 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/08/2010 1133 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/08/2010 1133 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/08/2010 1133 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1239 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/11/2010 1836 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/11/2010 1836 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-001
Client Sample ID: 12-18 OZ
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 1:15:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.44	s.u.			10/06/2010 1315	Field
Conductivity	1934	µm		hos/cm	10/06/2010 1315	Field
Dissolved Oxygen	6.11	mg		/L	10/06/2010 1315	Field
Dissolved Oxygen (pct)	62.2			%	10/06/2010 1315	Field
Redox Potential	+77	mV			10/06/2010 1315	Field
Turbidity	0.13	NT		U	10/06/2010 1315	Field
Temperature	14.0	°C			10/06/2010 1315	Field
Static Water Level	169.31	ft			10/06/2010 1315	Field
General Parameters						
pH	8.7	0.1		s.u.	10/08/2010 2055 KO	SM 4500 H B
Electrical Conductivity	1700	5		µmhos/cm	10/08/2010 2055 KO	SM 2510B
Total Dissolved Solids (180)	1140	10		mg/L	10/08/2010 1725 JF	SM 2540
Solids, Total Dissolved (Calc)	1030	10		mg/L	10/18/2010 1544 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	545	5		mg/L	10/08/2010 2055 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/15/2010 1550 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	601	5		mg/L	10/08/2010 2055 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	31	5		mg/L	10/08/2010 2055 KO	SM 2320B
Chloride	4	1		mg/L	10/08/2010 1530 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	10/08/2010 2055 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1535 AS	EPA 353.2
Sulfate	320	1		mg/L	10/08/2010 1530 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	10/08/2010 1216 DG	EPA 200.7
Magnesium	1	1		mg/L	10/08/2010 1216 DG	EPA 200.7
Potassium	4	1		mg/L	10/08/2010 1216 DG	EPA 200.7
Sodium	368	1		mg/L	10/08/2010 1216 DG	EPA 200.7

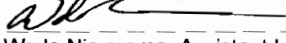
These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 12



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-001
Client Sample ID: 12-18 OZ
COC: 137081


Work Order: S1010117
Collection Date: 10/6/2010 1:15:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.85	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Carbonate as CO ₃	1.04	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Chloride	0.11	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sulfate	6.66	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Calcium	0.18	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Magnesium	0.10	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Potassium	0.10	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sodium	16.00	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.39	0		meq/L	10/18/2010 1544 KO	SM 1030E
Anion Sum	17.74	0		meq/L	10/18/2010 1544 KO	SM 1030E
Cation-Anion Balance	3.95	0		%	10/18/2010 1544 KO	SM 1030E
Radio Chemistry						
Gross Alpha	93.9 ± 7.0	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	21.7 ± 4.3	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	5.8 ± 0.3	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/24/2010 1201 TWP	Ga-Tech

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-001
Client Sample ID: 12-18 OZ
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 1:15:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1216 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/08/2010 1119 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/08/2010 1119 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/08/2010 1216 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/08/2010 1119 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1216 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/08/2010 1119 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1216 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/08/2010 1119 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 948 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/08/2010 1119 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1216 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/08/2010 1119 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/08/2010 1119 MS	EPA 200.8
Uranium	0.033	0.001		mg/L	10/08/2010 1119 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/08/2010 1119 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1216 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/11/2010 1827 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/11/2010 1827 DG	EPA 200.7

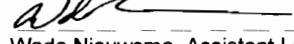
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-003
Client Sample ID: 12-18SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 2:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.03	s.u.			10/04/2010 1400	Field
Conductivity	942	µm		hos/cm	10/04/2010 1400	Field
Dissolved Oxygen	2.01	mg		/L	10/04/2010 1400	Field
Dissolved Oxygen (pct)	21.7			%	10/04/2010 1400	Field
Redox Potential	-185	mV			10/04/2010 1400	Field
Turbidity	8.54	NT		U	10/04/2010 1400	Field
Temperature	17.6	°C			10/04/2010 1400	Field
Static Water Level	48.00	ft			10/04/2010 1400	Field
General Parameters						
pH	8.2	0.1		s.u.	10/06/2010 2042 KO	SM 4500 H B
Electrical Conductivity	835	5		µmhos/cm	10/06/2010 2042 KO	SM 2510B
Total Dissolved Solids (180)	490	10		mg/L	10/07/2010 1245 JF	SM 2540
Solids, Total Dissolved (Calc)	490	10		mg/L	10/12/2010 835 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	290	5		mg/L	10/06/2010 2042 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/11/2010 1509 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	354	5		mg/L	10/06/2010 2042 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	10/06/2010 2042 KO	SM 2320B
Chloride	11	1		mg/L	10/06/2010 1736 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/07/2010 1828 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1510 AS	EPA 353.2
Sulfate	130	1		mg/L	10/06/2010 1736 KO	EPA 300.0
Cations						
Calcium	46	1		mg/L	10/06/2010 1454 DG	EPA 200.7
Magnesium	33	1		mg/L	10/06/2010 1454 DG	EPA 200.7
Potassium	16	1		mg/L	10/06/2010 1454 DG	EPA 200.7
Sodium	84	1		mg/L	10/06/2010 1454 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-003
Client Sample ID: 12-18SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 2:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.80	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Chloride	0.31	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Fluoride	ND	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sulfate	2.70	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Calcium	2.29	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Magnesium	2.68	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Potassium	0.40	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sodium	3.64	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	9.03	0		meq/L	10/12/2010 835 KO	SM 1030E
Anion Sum	8.83	0		meq/L	10/12/2010 835 KO	SM 1030E
Cation-Anion Balance	1.13	0		%	10/12/2010 835 KO	SM 1030E
Radio Chemistry						
Gross Alpha	4.0 ± 1.3	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	11.2 ± 2.0	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/16/2010 2200 SH	Ra-05

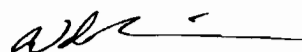
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

375
- 391 -



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-003
Client Sample ID: 12-18SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 2:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1454 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1222 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1222 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/06/2010 1454 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1222 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1454 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1222 MS	EPA 200.8
Iron	0.18	0.05		mg/L	10/06/2010 1454 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1222 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 924 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1222 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1454 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1222 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1222 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1222 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1222 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1454 DG	EPA 200.7
Total Metals						
Iron	0.37	0.05		mg/L	10/08/2010 1351 DG	EPA 200.7
Manganese	0.08	0.02		mg/L	10/08/2010 1351 DG	EPA 200.7

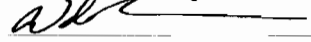
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

376
- 392 -



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-002
Client Sample ID: 12-18 SM
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 4:55:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.98	s.u.			10/06/2010 1655	Field
Conductivity	1642	µm		hos/cm	10/06/2010 1655	Field
Dissolved Oxygen	5.16	mg		/L	10/06/2010 1655	Field
Dissolved Oxygen (pct)	53.0			%	10/06/2010 1655	Field
Redox Potential	+26	mV			10/06/2010 1655	Field
Turbidity	0.57	NT		U	10/06/2010 1655	Field
Temperature	13.3	°C			10/06/2010 1655	Field
Static Water Level	91.12	ft			10/06/2010 1655	Field
General Parameters						
pH	8.8	0.1		s.u.	10/08/2010 2106 KO	SM 4500 H B
Electrical Conductivity	1450	5		µmhos/cm	10/08/2010 2106 KO	SM 2510B
Total Dissolved Solids (180)	970	10		mg/L	10/08/2010 1735 JF	SM 2540
Solids, Total Dissolved (Calc)	920	10		mg/L	10/18/2010 1544 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	534	5		mg/L	10/08/2010 2106 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/15/2010 1601 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	573	5		mg/L	10/08/2010 2106 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	38	5		mg/L	10/08/2010 2106 KO	SM 2320B
Chloride	4	1		mg/L	10/08/2010 1539 KO	EPA 300.0
Fluoride	2.1	0.1		mg/L	10/08/2010 2106 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1542 AS	EPA 353.2
Sulfate	216	1		mg/L	10/08/2010 1539 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	10/08/2010 1230 DG	EPA 200.7
Magnesium	1	1		mg/L	10/08/2010 1230 DG	EPA 200.7
Potassium	6	1		mg/L	10/08/2010 1230 DG	EPA 200.7
Sodium	371	1		mg/L	10/08/2010 1230 DG	EPA 200.7

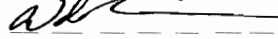
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-002
Client Sample ID: 12-18 SM
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 4:55:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.38	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Carbonate as CO ₃	1.28	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Chloride	0.10	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Fluoride	0.11	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sulfate	4.50	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Calcium	0.12	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Potassium	0.14	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sodium	16.14	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.50	0		meq/L	10/18/2010 1544 KO	SM 1030E
Anion Sum	15.38	0		meq/L	10/18/2010 1544 KO	SM 1030E
Cation-Anion Balance	3.50	0		%	10/18/2010 1544 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	9.4 ± 4.0	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	0.2 ± 0.1	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	2.27 ± 1.2	1		pCi/L	10/24/2010 1401 TWP	Ga-Tech

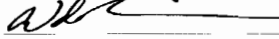
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-002
Client Sample ID: 12-18 SM
COC: 137081

Work Order: S1010117
Collection Date: 10/6/2010 4:55:00 PM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1230 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/08/2010 1122 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/08/2010 1122 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/08/2010 1230 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/08/2010 1122 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1230 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/08/2010 1122 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1230 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/08/2010 1122 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 949 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/08/2010 1122 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1230 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/08/2010 1122 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/08/2010 1122 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/08/2010 1122 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/08/2010 1122 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1230 DG	EPA 200.7
Total Metals						
Iron	0.06	0.05		mg/L	10/11/2010 1831 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/11/2010 1831 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010202001

Project: ROSS/ISR/09142
Lab ID: S1010202-001
Client Sample ID: 14-18 DM
COC: 137083

Work Order: S1010202
Collection Date: 10/12/2010 4:00:00 PM
Date Received: 10/13/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.32	s.u.			10/12/2010 1600	Field
Conductivity	2410	µm		hos/cm	10/12/2010 1600	Field
Dissolved Oxygen	5.91	mg		/L	10/12/2010 1600	Field
Dissolved Oxygen (pct)	55.7			%	10/12/2010 1600	Field
Redox Potential	+10	mV			10/12/2010 1600	Field
Turbidity	3.31	NT		U	10/12/2010 1600	Field
Temperature	12.6	°C			10/12/2010 1600	Field
Static Water Level	156.48	ft			10/12/2010 1600	Field
General Parameters						
pH	9.2	0.1		s.u.	10/15/2010 1602 KO	SM 4500 H B
Electrical Conductivity	2150	5		µmhos/cm	10/15/2010 1602 KO	SM 2510B
Total Dissolved Solids (180)	1240	10		mg/L	10/14/2010 1810 JF	SM 2540
Solids, Total Dissolved (Calc)	1160	10		mg/L	10/25/2010 1103 WN	SM 1030E
Alkalinity, Total (As CaCO3)	422	5		mg/L	10/15/2010 1602 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	10/25/2010 1433 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	391	5		mg/L	10/15/2010 1602 KO	SM 2320B
Alkalinity, Carbonate as CO3	61	5		mg/L	10/15/2010 1602 KO	SM 2320B
Chloride	438	1		mg/L	10/15/2010 1735 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	10/15/2010 1602 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1710 AS	EPA 353.2
Sulfate	ND	1		mg/L	10/15/2010 1735 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	10/15/2010 1231 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/15/2010 1231 DG	EPA 200.7
Potassium	13	1		mg/L	10/15/2010 1231 DG	EPA 200.7
Sodium	454	1		mg/L	10/15/2010 1231 DG	EPA 200.7

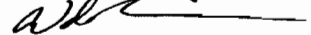
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010202001

Project: ROSS/ISR/09142
Lab ID: S1010202-001
Client Sample ID: 14-18 DM
COC: 137083

Work Order: S1010202
Collection Date: 10/12/2010 4:00:00 PM
Date Received: 10/13/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.40	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Carbonate as CO ₃	2.02	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Chloride	12.34	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Fluoride	0.06	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Sulfate	ND	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Calcium	0.13	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Magnesium	ND	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Potassium	0.34	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Sodium	19.72	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	20.20	0		meq/L	10/25/2010 1103 WN	SM 1030E
Anion Sum	20.84	0		meq/L	10/25/2010 1103 WN	SM 1030E
Cation-Anion Balance	1.55	0		%	10/25/2010 1103 WN	SM 1030E
Radio Chemistry						
Gross Alpha	28.3 ± 4.2	2		pCi/L	10/27/2010 947 SH	SM 7110B
Gross Beta	41.0 ± 4.4	3		pCi/L	10/27/2010 947 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2	B	pCi/L	10/23/2010 1717 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.56 ± 1.2	1		pCi/L	10/26/2010 605 TWP	Ga-Tech

These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010202001

Project: ROSS/ISR/09142
Lab ID: S1010202-001
Client Sample ID: 14-18 DM
COC: 137083

Work Order: S1010202
Collection Date: 10/12/2010 4:00:00 PM
Date Received: 10/13/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/15/2010 1231 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/14/2010 1541 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/14/2010 1541 MS	EPA 200.8
Boron	0.9	0.1		mg/L	10/15/2010 1231 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/14/2010 1541 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/15/2010 1231 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/14/2010 1541 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/15/2010 1231 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/14/2010 1541 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/19/2010 853 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/14/2010 1541 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/15/2010 1231 DG	EPA 200.7
Selenium	0.010	0.005		mg/L	10/14/2010 1541 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/14/2010 1541 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/14/2010 1541 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/14/2010 1541 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	10/15/2010 1231 DG	EPA 200.7
Total Metals						
Iron	0.15	0.05		mg/L	10/15/2010 1501 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/15/2010 1501 DG	EPA 200.7

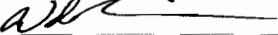
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-004
Client Sample ID: 14-18 OZ
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 12:05:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.75	s.u.			10/11/2010 1205	Field
Conductivity	3070	µm		hos/cm	10/11/2010 1205	Field
Dissolved Oxygen	2.89	mg		/L	10/11/2010 1205	Field
Dissolved Oxygen (pct)	26.9			%	10/11/2010 1205	Field
Turbidity	14.08	NT		U	10/11/2010 1205	Field
Temperature	11.9	°C			10/11/2010 1205	Field
Static Water Level	152.45	ft			10/11/2010 1205	Field
Oxygen Reduction Potential (ORP)	+16	mV			10/11/2010 1205	Field
General Parameters						
pH	8.6	0.1		s.u.	10/14/2010 1631 KO	SM 4500 H B
Electrical Conductivity	2730	5		µmhos/cm	10/14/2010 1631 KO	SM 2510B
Total Dissolved Solids (180)	1930	10		mg/L	10/13/2010 1710 JF	SM 2540
Solids, Total Dissolved (Calc)	1760	10		mg/L	10/26/2010 900 KO	SM 1030E
Total Suspended Solids	40	5		mg/L	10/18/2010 945 JF	SM 2540
Alkalinity, Total (As CaCO ₃)	518	5		mg/L	10/14/2010 1631 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/19/2010 1024 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	593	5		mg/L	10/14/2010 1631 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	19	5		mg/L	10/14/2010 1631 KO	SM 2320B
Chloride	9	1		mg/L	10/15/2010 1404 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	10/14/2010 1631 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1631 AS	EPA 353.2
Sulfate	826	1		mg/L	10/15/2010 1404 KO	EPA 300.0
Cations						
Calcium	9	1		mg/L	10/13/2010 2110 DG	EPA 200.7
Magnesium	3	1		mg/L	10/13/2010 2110 DG	EPA 200.7
Potassium	6	1		mg/L	10/13/2010 2110 DG	EPA 200.7
Sodium	600	1		mg/L	10/13/2010 2110 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-004
Client Sample ID: 14-18 OZ
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 12:05:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.72	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Carbonate as CO ₃	0.64	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Chloride	0.24	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sulfate	17.19	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Calcium	0.45	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Magnesium	0.25	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Potassium	0.15	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sodium	26.09	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	26.96	0		meq/L	10/26/2010 900 KO	SM 1030E
Anion Sum	27.83	0		meq/L	10/26/2010 900 KO	SM 1030E
Cation-Anion Balance	1.57	0		%	10/26/2010 900 KO	SM 1030E
Radio Chemistry						
Gross Alpha	183 ± 10.3	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	27.6 ± 4.1	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	4.9 ± 0.3	0.2		pCi/L	10/19/2010 1432 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/18/2010 2347 SH	Ra-05

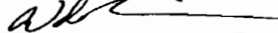
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-004
Client Sample ID: 14-18 OZ
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 12:05:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/13/2010 2110 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/13/2010 1527 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/13/2010 1527 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/13/2010 2110 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/13/2010 1527 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/13/2010 2110 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/13/2010 1527 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/13/2010 2110 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/13/2010 1527 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/15/2010 834 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/13/2010 1527 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/13/2010 2110 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/13/2010 1527 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/13/2010 1527 MS	EPA 200.8
Uranium	0.085	0.001		mg/L	10/13/2010 1527 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/13/2010 1527 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/13/2010 2110 DG	EPA 200.7
Total Metals						
Iron	0.52	0.05		mg/L	10/14/2010 1922 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	10/14/2010 1922 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-001
Client Sample ID: 14-18SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 11:30:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.27	s.u.			10/04/2010 1130	Field
Conductivity	2030	µm		hos/cm	10/04/2010 1130	Field
Dissolved Oxygen	2.46	mg		/L	10/04/2010 1130	Field
Dissolved Oxygen (pct)	26.0			%	10/04/2010 1130	Field
Redox Potential	-122	mV			10/04/2010 1130	Field
Turbidity	3.29	NT		U	10/04/2010 1130	Field
Temperature	16.0	°C			10/04/2010 1130	Field
Static Water Level	23.79	ft			10/04/2010 1130	Field
General Parameters						
pH	8.4	0.1		s.u.	10/06/2010 2020 KO	SM 4500 H B
Electrical Conductivity	1860	5		µmhos/cm	10/06/2010 2020 KO	SM 2510B
Total Dissolved Solids (180)	1220	10		mg/L	10/07/2010 1235 JF	SM 2540
Solids, Total Dissolved (Calc)	1130	10		mg/L	10/12/2010 835 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	478	5		mg/L	10/06/2010 2020 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	10/11/2010 1457 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	572	5		mg/L	10/06/2010 2020 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	5	5		mg/L	10/06/2010 2020 KO	SM 2320B
Chloride	67	1		mg/L	10/06/2010 1717 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	10/07/2010 1821 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/17/2010 958 AS	EPA 353.2
Sulfate	327	1		mg/L	10/06/2010 1717 KO	EPA 300.0
Cations						
Calcium	22	1		mg/L	10/06/2010 1449 DG	EPA 200.7
Magnesium	12	1		mg/L	10/06/2010 1449 DG	EPA 200.7
Potassium	13	1		mg/L	10/06/2010 1449 DG	EPA 200.7
Sodium	400	1		mg/L	10/06/2010 1449 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-001
Client Sample ID: 14-18SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 11:30:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.37	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Carbonate as CO ₃	0.18	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Chloride	1.87	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sulfate	6.81	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Calcium	1.11	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Magnesium	1.00	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Potassium	0.32	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sodium	17.40	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.84	0		meq/L	10/12/2010 835 KO	SM 1030E
Anion Sum	18.26	0		meq/L	10/12/2010 835 KO	SM 1030E
Cation-Anion Balance	4.15	0		%	10/12/2010 835 KO	SM 1030E
Radio Chemistry						
Gross Alpha	13.8 ± 3.3	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	7.9 ± 3.6	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	0.5 ± 0.1	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/16/2010 2200 SH	Ra-05


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-001
Client Sample ID: 14-18SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 11:30:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1449 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1215 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1215 MS	EPA 200.8
Boron	0.2	0.1		mg/L	10/06/2010 1449 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1215 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1449 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1215 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1449 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1215 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 913 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1215 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1449 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1215 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1215 MS	EPA 200.8
Uranium	0.007	0.001		mg/L	10/06/2010 1215 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1215 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1449 DG	EPA 200.7
Total Metals						
Iron	0.15	0.05		mg/L	10/08/2010 1342 DG	EPA 200.7
Manganese	0.07	0.02		mg/L	10/08/2010 1342 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010202001

Project: ROSS/ISR/09142
Lab ID: S1010202-002
Client Sample ID: 14-18 SM
COC: 137083

Work Order: S1010202
Collection Date: 10/12/2010 4:45:00 PM
Date Received: 10/13/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.17	s.u.			10/12/2010 1645	Field
Conductivity	1781	µm		hos/cm	10/12/2010 1645	Field
Dissolved Oxygen	5.61	mg		/L	10/12/2010 1645	Field
Dissolved Oxygen (pct)	51.6			%	10/12/2010 1645	Field
Redox Potential	+131	mV			10/12/2010 1645	Field
Turbidity	0.05	NT		U	10/12/2010 1645	Field
Temperature	11.6	°C			10/12/2010 1645	Field
Static Water Level	66.90	ft			10/12/2010 1645	Field
General Parameters						
pH	9.0	0.1		s.u.	10/15/2010 1612 KO	SM 4500 H B
Electrical Conductivity	1560	5		µmhos/cm	10/15/2010 1612 KO	SM 2510B
Total Dissolved Solids (180)	1000	10		mg/L	10/14/2010 1815 JF	SM 2540
Solids, Total Dissolved (Calc)	950	10		mg/L	10/25/2010 1103 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	582	5		mg/L	10/15/2010 1612 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	10/25/2010 1434 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	599	5		mg/L	10/15/2010 1612 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	54	5		mg/L	10/15/2010 1612 KO	SM 2320B
Chloride	2	1		mg/L	10/15/2010 1831 KO	EPA 300.0
Fluoride	1.5	0.1		mg/L	10/15/2010 1612 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1711 AS	EPA 353.2
Sulfate	230	1		mg/L	10/15/2010 1831 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	10/15/2010 1233 DG	EPA 200.7
Magnesium	1	1		mg/L	10/15/2010 1233 DG	EPA 200.7
Potassium	8	1		mg/L	10/15/2010 1233 DG	EPA 200.7
Sodium	360	1		mg/L	10/15/2010 1233 DG	EPA 200.7

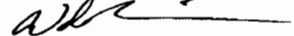
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010202001

Project: ROSS/ISR/09142
Lab ID: S1010202-002
Client Sample ID: 14-18 SM
COC: 137083

Work Order: S1010202
Collection Date: 10/12/2010 4:45:00 PM
Date Received: 10/13/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.82	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Carbonate as CO ₃	1.80	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Chloride	0.06	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Fluoride	0.08	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Sulfate	4.78	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Calcium	0.09	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Magnesium	0.09	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Potassium	0.20	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Sodium	15.63	0.01		meq/L	10/25/2010 1103 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	16.02	0		meq/L	10/25/2010 1103 WN	SM 1030E
Anion Sum	16.56	0		meq/L	10/25/2010 1103 WN	SM 1030E
Cation-Anion Balance	1.63	0		%	10/25/2010 1103 WN	SM 1030E
Radio Chemistry						
Gross Alpha	11.2 ± 3.0	2		pCi/L	10/27/2010 947 SH	SM 7110B
Gross Beta	12.4 ± 3.7	3		pCi/L	10/27/2010 947 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/23/2010 1717 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/26/2010 921 TWP	Ga-Tech

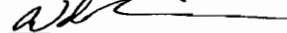
These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010202001

Project: ROSS/ISR/09142
Lab ID: S1010202-002
Client Sample ID: 14-18 SM
COC: 137083

Work Order: S1010202
Collection Date: 10/12/2010 4:45:00 PM
Date Received: 10/13/2010 8:10:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/15/2010 1233 DG	EPA 200.7
Arsenic	0.005	0.005		mg/L	10/14/2010 1545 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/14/2010 1545 MS	EPA 200.8
Boron	0.6	0.1		mg/L	10/15/2010 1233 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/14/2010 1545 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/15/2010 1233 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/14/2010 1545 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/15/2010 1233 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/14/2010 1545 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/19/2010 855 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/14/2010 1545 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/15/2010 1233 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/14/2010 1545 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/14/2010 1545 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/14/2010 1545 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/14/2010 1545 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/15/2010 1233 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/15/2010 1503 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/15/2010 1503 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/4/2010
Report ID: S1010214002
(Replaces S1010214001)

Project: ROSS/STRATA/09142
Lab ID: S1010214-002
Client Sample ID: 21-19 DM
COC: 137084

Work Order: S1010214
Collection Date: 10/14/2010 12:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.31		s.u.		10/14/2010 1230	Field
Conductivity	2390		µm	hos/cm	10/14/2010 1230	Field
Dissolved Oxygen	6.76		mg	/L	10/14/2010 1230	Field
Dissolved Oxygen (pct)	66.2			%	10/14/2010 1230	Field
Redox Potential	14.8		mV		10/14/2010 1230	Field
Turbidity	4.20		NT	U	10/14/2010 1230	Field
Temperature	14.8		°C		10/14/2010 1230	Field
Static Water Level	196.12		ft		10/14/2010 1230	Field
General Parameters						
pH	9.1	0.1		s.u.	10/15/2010 2155 KO	SM 4500 H B
Electrical Conductivity	2170	5		µmhos/cm	10/15/2010 2155 KO	SM 2510B
Total Dissolved Solids (180)	1250	10		mg/L	10/14/2010 1830 JF	SM 2540
Solids, Total Dissolved (Calc)	1160	10		mg/L	11/04/2010 1336 VN	SM 1030E
Alkalinity, Total (As CaCO ₃)	431	5		mg/L	10/15/2010 2155 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.9	0.1		mg/L	10/25/2010 1446 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	426	5		mg/L	10/15/2010 2155 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	49	5		mg/L	10/15/2010 2155 KO	SM 2320B
Chloride	438	1		mg/L	11/02/2010 2117 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	10/15/2010 2155 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/22/2010 1003 AS	EPA 353.2
Sulfate	ND	1		mg/L	11/02/2010 2117 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	10/15/2010 1405 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/15/2010 1405 DG	EPA 200.7
Potassium	14	1		mg/L	10/15/2010 1405 DG	EPA 200.7
Sodium	449	1		mg/L	10/15/2010 1405 DG	EPA 200.7

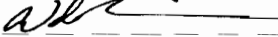
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/4/2010
Report ID: S1010214002
(Replaces S1010214001)

Project: ROSS/STRATA/09142
Lab ID: S1010214-002
Client Sample ID: 21-19 DM
COC: 137084

Work Order: S1010214
Collection Date: 10/14/2010 12:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.97	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Carbonate as CO ₃	1.63	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Chloride	12.36	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Fluoride	0.06	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Sulfate	ND	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Calcium	0.15	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Magnesium	ND	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Potassium	0.36	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Sodium	19.51	0.01		meq/L	11/04/2010 1336 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	20.03	0		meq/L	11/04/2010 1336 WN	SM 1030E
Anion Sum	21.03	0		meq/L	11/04/2010 1336 WN	SM 1030E
Cation-Anion Balance	2.43	0		%	11/04/2010 1336 WN	SM 1030E
Radio Chemistry						
Gross Alpha	4.5 ± 2.4	2		pCi/L	10/27/2010 947 SH	SM 7110B
Gross Beta	9.2 ± 3.5	3		pCi/L	10/27/2010 947 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/23/2010 1717 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/26/2010 1608 TWP	Ga-Tech


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/4/2010
Report ID: S1010214002
(Replaces S1010214001)

Project: ROSS/STRATA/09142
Lab ID: S1010214-002
Client Sample ID: 21-19 DM
COC: 137084

Work Order: S1010214
Collection Date: 10/14/2010 12:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/15/2010 1405 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/14/2010 1754 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/14/2010 1754 MS	EPA 200.8
Boron	0.9	0.1		mg/L	10/15/2010 1405 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/14/2010 1754 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/15/2010 1405 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/14/2010 1754 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/15/2010 1405 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/14/2010 1754 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/19/2010 944 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/14/2010 1754 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/15/2010 1405 DG	EPA 200.7
Selenium	0.013	0.005		mg/L	10/14/2010 1754 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/14/2010 1754 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/14/2010 1754 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/14/2010 1754 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/15/2010 1405 DG	EPA 200.7
Total Metals						
Iron	0.09	0.05		mg/L	10/15/2010 1510 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/15/2010 1510 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-003
Client Sample ID: 21-19 OZ
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 4:30:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.60	s.u.			10/11/2010 1630	Field
Conductivity	2620	µm		hos/cm	10/11/2010 1630	Field
Dissolved Oxygen	2.55	mg		/L	10/11/2010 1630	Field
Dissolved Oxygen (pct)	25.9			%	10/11/2010 1630	Field
Turbidity	1.04	NT		U	10/11/2010 1630	Field
Temperature	12.5	°C			10/11/2010 1630	Field
Static Water Level	208.04	ft			10/11/2010 1630	Field
Oxygen Reduction Potential (ORP)	-31	mV			10/11/2010 1630	Field
General Parameters						
pH	8.6	0.1		s.u.	10/14/2010 1620 KO	SM 4500 H B
Electrical Conductivity	2300	5		µmhos/cm	10/14/2010 1620 KO	SM 2510B
Total Dissolved Solids (180)	1590	10		mg/L	10/13/2010 1705 JF	SM 2540
Solids, Total Dissolved (Calc)	1460	10		mg/L	10/26/2010 900 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	10/18/2010 940 JF	SM 2540
Alkalinity, Total (As CaCO3)	535	5		mg/L	10/14/2010 1620 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	10/19/2010 1023 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	615	5		mg/L	10/14/2010 1620 KO	SM 2320B
Alkalinity, Carbonate as CO3	19	5		mg/L	10/14/2010 1620 KO	SM 2320B
Chloride	7	1		mg/L	10/15/2010 1309 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	10/14/2010 1620 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1630 AS	EPA 353.2
Sulfate	605	1		mg/L	10/15/2010 1309 KO	EPA 300.0
Cations						
Calcium	7	1		mg/L	10/13/2010 2108 DG	EPA 200.7
Magnesium	2	1		mg/L	10/13/2010 2108 DG	EPA 200.7
Potassium	6	1		mg/L	10/13/2010 2108 DG	EPA 200.7
Sodium	516	1		mg/L	10/13/2010 2108 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

395
- 411 -



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-003
Client Sample ID: 21-19 OZ
COC: 137082

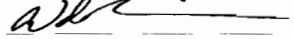
Work Order: S1010168
Collection Date: 10/11/2010 4:30:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.07	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Carbonate as CO ₃	0.63	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Chloride	0.18	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sulfate	12.60	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Calcium	0.36	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Magnesium	0.17	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Potassium	0.14	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sodium	22.45	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.13	0		meq/L	10/26/2010 900 KO	SM 1030E
Anion Sum	23.51	0		meq/L	10/26/2010 900 KO	SM 1030E
Cation-Anion Balance	0.81	0		%	10/26/2010 900 KO	SM 1030E
Radio Chemistry						
Gross Alpha	18.4 ± 3.6	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	7.1 ± 3.6	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	0.8 ± 0.1	0.2		pCi/L	10/19/2010 1432 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/18/2010 2347 SH	Ra-05

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-003
Client Sample ID: 21-19 OZ
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 4:30:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/13/2010 2108 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/13/2010 1523 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/13/2010 1523 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/13/2010 2108 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/13/2010 1523 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/13/2010 2108 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/13/2010 1523 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/13/2010 2108 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/13/2010 1523 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/15/2010 832 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/13/2010 1523 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/13/2010 2108 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/13/2010 1523 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/13/2010 1523 MS	EPA 200.8
Uranium	0.005	0.001		mg/L	10/13/2010 1523 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/13/2010 1523 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	10/13/2010 2108 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/14/2010 1920 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/14/2010 1920 DG	EPA 200.7

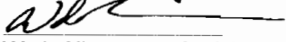
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-002
Client Sample ID: 21-19SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 12:45:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.22	s.u.			10/04/2010 1245	Field
Conductivity	1084	µm		hos/cm	10/04/2010 1245	Field
Dissolved Oxygen	2.87	mg		/L	10/04/2010 1245	Field
Dissolved Oxygen (pct)	29.3			%	10/04/2010 1245	Field
Redox Potential	-67	mV			10/04/2010 1245	Field
Turbidity	13.07	NT		U	10/04/2010 1245	Field
Temperature	19.6	°C			10/04/2010 1245	Field
Static Water Level	11.52	ft			10/04/2010 1245	Field
General Parameters						
pH	8.2	0.1		s.u.	10/06/2010 2031 KO	SM 4500 H B
Electrical Conductivity	974	5		µmhos/cm	10/06/2010 2031 KO	SM 2510B
Total Dissolved Solids (180)	610	10		mg/L	10/07/2010 1240 JF	SM 2540
Solids, Total Dissolved (Calc)	580	10		mg/L	10/12/2010 835 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	399	5		mg/L	10/06/2010 2031 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1508 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	487	5		mg/L	10/06/2010 2031 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	10/06/2010 2031 KO	SM 2320B
Chloride	17	1		mg/L	10/06/2010 1727 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	10/07/2010 1825 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.3	0.1		mg/L	10/17/2010 959 AS	EPA 353.2
Sulfate	91	1		mg/L	10/06/2010 1727 KO	EPA 300.0
Cations						
Calcium	30	1		mg/L	10/06/2010 1451 DG	EPA 200.7
Magnesium	13	1		mg/L	10/06/2010 1451 DG	EPA 200.7
Potassium	8	1		mg/L	10/06/2010 1451 DG	EPA 200.7
Sodium	177	1		mg/L	10/06/2010 1451 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-002
Client Sample ID: 21-19SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 12:45:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.98	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Chloride	0.46	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sulfate	1.88	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Calcium	1.47	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Magnesium	1.06	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Potassium	0.20	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sodium	7.71	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.46	0		meq/L	10/12/2010 835 KO	SM 1030E
Anion Sum	10.35	0		meq/L	10/12/2010 835 KO	SM 1030E
Cation-Anion Balance	0.50	0		%	10/12/2010 835 KO	SM 1030E
Radio Chemistry						
Gross Alpha	6.7 ± 1.5	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	5.3 ± 1.8	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	0.3 ± 0.1	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.2 ± 1.1	1		pCi/L	10/16/2010 2200 SH	Ra-05

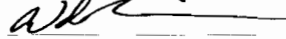
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-002
Client Sample ID: 21-19SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 12:45:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1451 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1219 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1219 MS	EPA 200.8
Boron	0.1	0.1		mg/L	10/06/2010 1451 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1219 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1451 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1219 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1451 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1219 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 915 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1219 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1451 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1219 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1219 MS	EPA 200.8
Uranium	0.005	0.001		mg/L	10/06/2010 1219 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1219 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1451 DG	EPA 200.7
Total Metals						
Iron	0.37	0.05		mg/L	10/08/2010 1346 DG	EPA 200.7
Manganese	0.20	0.02		mg/L	10/08/2010 1346 DG	EPA 200.7

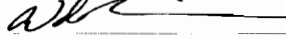
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/4/2010
Report ID: S1010214002
(Replaces S1010214001)

Project: ROSS/STRATA/09142
Lab ID: S1010214-001
Client Sample ID: 21-19 SM
COC: 137084

Work Order: S1010214
Collection Date: 10/14/2010 12:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.85	s.u.			10/14/2010 1230	Field
Conductivity	2190	µm		hos/cm	10/14/2010 1230	Field
Dissolved Oxygen	3.77	mg		/L	10/14/2010 1230	Field
Dissolved Oxygen (pct)	35.6			%	10/14/2010 1230	Field
Redox Potential	+137	mV			10/14/2010 1230	Field
Turbidity	0.49	NT		U	10/14/2010 1230	Field
Temperature	12.4	°C			10/14/2010 1230	Field
Static Water Level	85.18	ft			10/14/2010 1230	Field
General Parameters						
pH	9.6	0.1		s.u.	10/15/2010 2145 KO	SM 4500 H B
Electrical Conductivity	1960	5		µmhos/cm	10/15/2010 2145 KO	SM 2510B
Total Dissolved Solids (180)	1300	10		mg/L	10/14/2010 1820 JF	SM 2540
Solids, Total Dissolved (Calc)	1200	10		mg/L	11/04/2010 1336 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	633	5		mg/L	10/15/2010 2145 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/25/2010 1445 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	491	5		mg/L	10/15/2010 2145 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	138	5		mg/L	10/15/2010 2145 KO	SM 2320B
Chloride	2	1		mg/L	11/02/2010 2117 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	10/15/2010 2145 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/22/2010 1002 AS	EPA 353.2
Sulfate	335	1		mg/L	11/02/2010 2117 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	10/15/2010 1358 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/15/2010 1358 DG	EPA 200.7
Potassium	37	1		mg/L	10/15/2010 1358 DG	EPA 200.7
Sodium	447	1		mg/L	10/15/2010 1358 DG	EPA 200.7

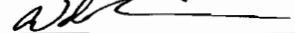
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/4/2010
Report ID: S1010214002
(Replaces S1010214001)

Project: ROSS/STRATA/09142
Lab ID: S1010214-001
Client Sample ID: 21-19 SM
COC: 137084

Work Order: S1010214
Collection Date: 10/14/2010 12:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.05	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Carbonate as CO ₃	4.59	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Chloride	0.06	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Fluoride	0.05	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Sulfate	6.97	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Calcium	0.05	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Magnesium	ND	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Potassium	0.93	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Sodium	19.43	0.01		meq/L	11/04/2010 1336 VN	SM 1030E
Cation / Anion Balance						
Cation Sum	20.43	0		meq/L	11/04/2010 1336 VN	SM 1030E
Anion Sum	19.75	0		meq/L	11/04/2010 1336 VN	SM 1030E
Cation-Anion Balance	1.69	0		%	11/04/2010 1336 VN	SM 1030E
Radio Chemistry						
Gross Alpha	12.2±9.3	2		pCi/L	10/27/2010 947 SH	SM 7110B
Gross Beta	42.5±13.4	3		pCi/L	10/27/2010 947 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/23/2010 1717 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/26/2010 1305 TWP	Ga-Tech


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/4/2010
Report ID: S1010214002
(Replaces S1010214001)

Project: ROSS/STRATA/09142
Lab ID: S1010214-001
Client Sample ID: 21-19 SM
COC: 137084

Work Order: S1010214
Collection Date: 10/14/2010 12:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/15/2010 1358 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	10/14/2010 1750 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/14/2010 1750 MS	EPA 200.8
Boron	0.6	0.1		mg/L	10/15/2010 1358 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/14/2010 1750 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/15/2010 1358 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/14/2010 1750 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/15/2010 1358 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/14/2010 1750 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/19/2010 942 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/14/2010 1750 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/15/2010 1358 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/14/2010 1750 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/14/2010 1750 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	10/14/2010 1750 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/14/2010 1750 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/15/2010 1358 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/15/2010 1508 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/15/2010 1508 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-002
Client Sample ID: 34-18 DM
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 12:35:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.29	s.u.			10/11/2010 1235	Field
Conductivity	2540	µm		hos/cm	10/11/2010 1235	Field
Dissolved Oxygen	1.18	mg		/L	10/11/2010 1235	Field
Dissolved Oxygen (pct)	12.0			%	10/11/2010 1235	Field
Turbidity	2.00	NT		U	10/11/2010 1235	Field
Temperature	14.7	°C			10/11/2010 1235	Field
Static Water Level	273.63	ft			10/11/2010 1235	Field
Oxygen Reduction Potential (ORP)	-70	mV			10/11/2010 1235	Field
General Parameters						
pH	9.3	0.1		s.u.	10/14/2010 1610 KO	SM 4500 H B
Electrical Conductivity	2210	5		µmhos/cm	10/14/2010 1610 KO	SM 2510B
Total Dissolved Solids (180)	1300	10		mg/L	10/13/2010 1655 JF	SM 2540
Solids, Total Dissolved (Calc)	1150	10		mg/L	10/26/2010 900 KO	SM 1030E
Alkalinity, Total (As CaCO3)	427	5		mg/L	10/14/2010 1610 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/19/2010 1022 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	374	5		mg/L	10/14/2010 1610 KO	SM 2320B
Alkalinity, Carbonate as CO3	72	5		mg/L	10/14/2010 1610 KO	SM 2320B
Chloride	422	1		mg/L	10/15/2010 1300 KO	EPA 300.0
Fluoride	1.0	0.1		mg/L	10/14/2010 1610 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1623 AS	EPA 353.2
Sulfate	6	1		mg/L	10/15/2010 1300 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	10/13/2010 2106 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/13/2010 2106 DG	EPA 200.7
Potassium	15	1		mg/L	10/13/2010 2106 DG	EPA 200.7
Sodium	452	1		mg/L	10/13/2010 2106 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-002
Client Sample ID: 34-18 DM
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 12:35:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.13	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Carbonate as CO ₃	2.39	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Chloride	11.91	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sulfate	0.12	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Calcium	0.10	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Magnesium	ND	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Potassium	0.38	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sodium	19.65	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.15	0		meq/L	10/26/2010 900 KO	SM 1030E
Anion Sum	20.62	0		meq/L	10/26/2010 900 KO	SM 1030E
Cation-Anion Balance	1.17	0		%	10/26/2010 900 KO	SM 1030E
Radio Chemistry						
Gross Alpha	3.1 ± 2.3	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	6.6 ± 3.6	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	0.3 ± 0.1	0.2		pCi/L	10/19/2010 1432 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/18/2010 2347 SH	Ra-05

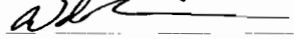
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-002
Client Sample ID: 34-18 DM
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 12:35:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/13/2010 2106 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/13/2010 1520 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/13/2010 1520 MS	EPA 200.8
Boron	0.8	0.1		mg/L	10/13/2010 2106 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/13/2010 1520 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/13/2010 2106 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/13/2010 1520 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/13/2010 2106 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/13/2010 1520 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/15/2010 831 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/13/2010 1520 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/13/2010 2106 DG	EPA 200.7
Selenium	0.010	0.005		mg/L	10/13/2010 1520 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/13/2010 1520 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/13/2010 1520 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/13/2010 1520 MS	EPA 200.8
Zinc	0.04	0.01		mg/L	10/13/2010 2106 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/14/2010 1918 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/14/2010 1918 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-004
Client Sample ID: 34-18 OZ
COC: 137081


Work Order: S1010117
Collection Date: 10/7/2010 11:00:00 AM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.62	s.u.			10/07/2010 1100	Field
Conductivity	2510	µm		hos/cm	10/07/2010 1100	Field
Dissolved Oxygen	3.26	mg		/L	10/07/2010 1100	Field
Dissolved Oxygen (pct)	31.8			%	10/07/2010 1100	Field
Redox Potential	-62	mV			10/07/2010 1100	Field
Turbidity	1.57	NT		U	10/07/2010 1100	Field
Temperature	13.2	°C			10/07/2010 1100	Field
Static Water Level	278.20	ft			10/07/2010 1100	Field
General Parameters						
pH	8.7	0.1		s.u.	10/08/2010 2127 KO	SM 4500 H B
Electrical Conductivity	2230	5		µmhos/cm	10/08/2010 2127 KO	SM 2510B
Total Dissolved Solids (180)	1560	10		mg/L	10/08/2010 1745 JF	SM 2540
Solids, Total Dissolved (Calc)	1380	10		mg/L	10/18/2010 1544 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	504	5		mg/L	10/08/2010 2127 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.7	0.1		mg/L	10/15/2010 1603 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	559	5		mg/L	10/08/2010 2127 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	28	5		mg/L	10/08/2010 2127 KO	SM 2320B
Chloride	6	1		mg/L	10/08/2010 1557 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	10/08/2010 2127 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1544 AS	EPA 353.2
Sulfate	578	1		mg/L	10/08/2010 1557 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	10/12/2010 1404 DG	EPA 200.7
Magnesium	2	1		mg/L	10/12/2010 1404 DG	EPA 200.7
Potassium	6	1		mg/L	10/12/2010 1404 DG	EPA 200.7
Sodium	481	1		mg/L	10/12/2010 1404 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	<ul style="list-style-type: none">• Value exceeds Maximum Contaminant LevelE Value above quantitation rangeJ Analyte detected below quantitation limitsM Value exceeds Monthly Ave or MCLO Outside the Range of Dilutions	<ul style="list-style-type: none">B Analyte detected in the associated Method BlankH Holding times for preparation or analysis exceededL Analyzed by a contract laboratoryND Not Detected at the Reporting LimitS Spike Recovery outside accepted recovery limits
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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-004
Client Sample ID: 34-18 OZ
COC: 137081

Work Order: S1010117
Collection Date: 10/7/2010 11:00:00 AM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.16	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Carbonate as CO ₃	0.92	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Chloride	0.16	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sulfate	12.02	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Calcium	0.31	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Magnesium	0.18	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Potassium	0.15	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Sodium	20.93	0.01		meq/L	10/18/2010 1544 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.58	0		meq/L	10/18/2010 1544 KO	SM 1030E
Anion Sum	22.30	0		meq/L	10/18/2010 1544 KO	SM 1030E
Cation-Anion Balance	1.64	0		%	10/18/2010 1544 KO	SM 1030E
Radio Chemistry						
Gross Alpha	93.8 ± 6.9	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	26.7 ± 4.3	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	8.8 ± 0.4	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/25/2010 753 TWP	Ga-Tech

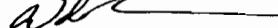
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010117001

Project: ROSS/STRATA/09142
Lab ID: S1010117-004
Client Sample ID: 34-18 OZ
COC: 137081

Work Order: S1010117
Collection Date: 10/7/2010 11:00:00 AM
Date Received: 10/7/2010 2:44:00 PM
Sampler: JR
Matrix: Water

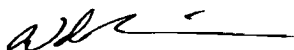
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1241 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/08/2010 1137 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/08/2010 1137 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/08/2010 1241 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/08/2010 1137 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1241 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/08/2010 1137 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1241 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/08/2010 1137 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 957 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/08/2010 1137 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1241 DG	EPA 200.7
Selenium	0.009	0.005		mg/L	10/08/2010 1137 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/08/2010 1137 MS	EPA 200.8
Uranium	0.041	0.001		mg/L	10/08/2010 1137 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/08/2010 1137 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1241 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/11/2010 1839 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/11/2010 1839 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-001
Client Sample ID: 34-18 SM
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 1:05:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.91	s.u.			10/11/2010 1305	Field
Conductivity	2040	µm		hos/cm	10/11/2010 1305	Field
Dissolved Oxygen	7.37	mg		/L	10/11/2010 1305	Field
Dissolved Oxygen (pct)	69.5			%	10/11/2010 1305	Field
Turbidity	6.19	NT		U	10/11/2010 1305	Field
Temperature	11.6	°C			10/11/2010 1305	Field
Static Water Level	136.11	ft			10/11/2010 1305	Field
Oxygen Reduction Potential (ORP)	-166	mV			10/11/2010 1305	Field
General Parameters						
pH	10.5	0.1		s.u.	10/14/2010 1600 KO	SM 4500 H B
Electrical Conductivity	1800	5		µmhos/cm	10/14/2010 1600 KO	SM 2510B
Total Dissolved Solids (180)	1140	10		mg/L	10/13/2010 1650 JF	SM 2540
Solids, Total Dissolved (Calc)	1050	10		mg/L	10/26/2010 900 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	458	5		mg/L	10/14/2010 1600 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.0	0.1		mg/L	10/19/2010 1021 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	51	5		mg/L	10/14/2010 1600 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	250	5		mg/L	10/14/2010 1600 KO	SM 2320B
Chloride	3	1		mg/L	10/25/2010 1757 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	10/14/2010 1600 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1622 AS	EPA 353.2
Sulfate	367	1		mg/L	10/25/2010 1757 KO	EPA 300.0
Cations						
Calcium	ND	1		mg/L	10/25/2010 1517 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/25/2010 1517 DG	EPA 200.7
Potassium	20	1		mg/L	10/25/2010 1517 DG	EPA 200.7
Sodium	383	1		mg/L	10/25/2010 1517 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-001
Client Sample ID: 34-18 SM
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 1:05:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	0.82	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Carbonate as CO ₃	8.32	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Chloride	0.08	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sulfate	7.64	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Calcium	ND	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Magnesium	ND	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Potassium	0.51	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Sodium	16.65	0.01		meq/L	10/26/2010 900 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.16	0		meq/L	10/26/2010 900 KO	SM 1030E
Anion Sum	16.93	0		meq/L	10/26/2010 900 KO	SM 1030E
Cation-Anion Balance	0.67	0		%	10/26/2010 900 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	11.0 ± 3.7	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	0.2 ± 0.1	0.2		pCi/L	10/19/2010 1432 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/18/2010 2347 SH	Ra-05


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010168001

Project: Ross/Strata/09142
Lab ID: S1010168-001
Client Sample ID: 34-18 SM
COC: 137082

Work Order: S1010168
Collection Date: 10/11/2010 1:05:00 PM
Date Received: 10/12/2010 4:17:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/13/2010 2057 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/13/2010 1509 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/13/2010 1509 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/13/2010 2057 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/13/2010 1509 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/13/2010 2057 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/13/2010 1509 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/13/2010 2057 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/13/2010 1509 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/15/2010 829 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/13/2010 1509 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/13/2010 2057 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/13/2010 1509 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/13/2010 1509 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/13/2010 1509 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/13/2010 1509 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/13/2010 2057 DG	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	10/14/2010 1908 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/14/2010 1908 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-002
Client Sample ID: 34-7 DM
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 3:00:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.24	s.u.			10/13/2010 1500	Field
Conductivity	3430	µm		hos/cm	10/13/2010 1500	Field
Dissolved Oxygen	7.92	mg		/L	10/13/2010 1500	Field
Dissolved Oxygen (pct)	77.8			%	10/13/2010 1500	Field
Redox Potential	+21	mV			10/13/2010 1500	Field
Turbidity	69.6	NT		U	10/13/2010 1500	Field
Temperature	14.3	°C			10/13/2010 1500	Field
Static Water Level	89.42	ft			10/13/2010 1500	Field
General Parameters						
pH	9.9	0.1		s.u.	10/15/2010 2217 KO	SM 4500 H B
Electrical Conductivity	3100	5		µmhos/cm	10/15/2010 2217 KO	SM 2510B
Total Dissolved Solids (180)	1860	10		mg/L	10/18/2010 1710 JF	SM 2540
Solids, Total Dissolved (Calc)	1700	10		mg/L	10/28/2010 1838 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	447	5		mg/L	10/15/2010 2217 KO	SM 2320B
Nitrogen, Ammonia (As N)	1.5	0.1		mg/L	10/25/2010 1448 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	208	5		mg/L	10/15/2010 2217 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	166	5		mg/L	10/15/2010 2217 KO	SM 2320B
Chloride	640	1		mg/L	10/25/2010 1806 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	10/15/2010 2217 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/22/2010 1005 AS	EPA 353.2
Sulfate	123	1		mg/L	10/25/2010 1806 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	10/15/2010 1410 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/15/2010 1410 DG	EPA 200.7
Potassium	22	1		mg/L	10/15/2010 1410 DG	EPA 200.7
Sodium	645	1		mg/L	10/15/2010 1410 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-002
Client Sample ID: 34-7 DM
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 3:00:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	3.40	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Carbonate as CO ₃	5.52	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Chloride	18.06	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Fluoride	0.04	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Sulfate	2.56	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Calcium	0.09	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Magnesium	ND	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Potassium	0.57	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Sodium	28.03	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	28.70	0		meq/L	10/28/2010 1838 WN	SM 1030E
Anion Sum	29.61	0		meq/L	10/28/2010 1838 WN	SM 1030E
Cation-Anion Balance	1.54	0		%	10/28/2010 1838 WN	SM 1030E
Radiochemistry						
Gross Alpha	10.5 ± 3.5	2		pCi/L	10/27/2010 947 SH	SM 7110B
Gross Beta	16.3 ± 4.7	3		pCi/L	10/27/2010 947 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/23/2010 1717 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/27/2010 1409 TWP	Ga-Tech


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-002
Client Sample ID: 34-7 DM
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 3:00:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/15/2010 1410 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	10/14/2010 1801 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/14/2010 1801 MS	EPA 200.8
Boron	1.0	0.1		mg/L	10/15/2010 1410 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/14/2010 1801 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/15/2010 1410 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/14/2010 1801 MS	EPA 200.8
Iron	0.10	0.05		mg/L	10/15/2010 1410 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/14/2010 1801 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/19/2010 955 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/14/2010 1801 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/15/2010 1410 DG	EPA 200.7
Selenium	0.014	0.005		mg/L	10/14/2010 1801 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/14/2010 1801 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/14/2010 1801 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/14/2010 1801 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/15/2010 1410 DG	EPA 200.7
Total Metals						
Iron	2.22	0.05		mg/L	10/15/2010 1522 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	10/15/2010 1522 DG	EPA 200.7

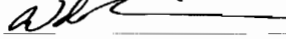
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-001
Client Sample ID: 34-7 OZ
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 10:45:00 AM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.85	s.u.			10/13/2010 1045	Field
Conductivity	2430	µm		hos/cm	10/13/2010 1045	Field
Dissolved Oxygen	3.75	mg		/L	10/13/2010 1045	Field
Dissolved Oxygen (pct)	34.0			%	10/13/2010 1045	Field
Redox Potential	+195	mV			10/13/2010 1045	Field
Turbidity	0.21	NT		U	10/13/2010 1045	Field
Temperature	11.6	°C			10/13/2010 1045	Field
Static Water Level	84.02	ft			10/13/2010 1045	Field
General Parameters						
pH	8.8	0.1		s.u.	10/15/2010 2206 KO	SM 4500 H B
Electrical Conductivity	2190	5		µmhos/cm	10/15/2010 2206 KO	SM 2510B
Total Dissolved Solids (180)	1550	10		mg/L	10/18/2010 1700 JF	SM 2540
Solids, Total Dissolved (Calc)	1380	10		mg/L	11/08/2010 1058 VN	SM 1030E
Alkalinity, Total (As CaCO ₃)	568	5		mg/L	10/15/2010 2206 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.8	0.1		mg/L	10/25/2010 1447 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	624	5		mg/L	10/15/2010 2206 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	34	5		mg/L	10/15/2010 2206 KO	SM 2320B
Chloride	4	1		mg/L	11/05/2010 2022 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	10/15/2010 2206 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/22/2010 1004 AS	EPA 353.2
Sulfate	512	1		mg/L	11/05/2010 2022 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	10/15/2010 1408 DG	EPA 200.7
Magnesium	2	1		mg/L	10/15/2010 1408 DG	EPA 200.7
Potassium	8	1		mg/L	10/15/2010 1408 DG	EPA 200.7
Sodium	512	1		mg/L	10/15/2010 1408 DG	EPA 200.7

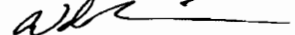
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-001
Client Sample ID: 34-7 OZ
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 10:45:00 AM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.22	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Carbonate as CO ₃	1.13	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Chloride	0.11	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Fluoride	0.02	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Sulfate	10.65	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Calcium	0.27	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Magnesium	0.19	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Potassium	0.21	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Sodium	22.26	0.01		meq/L	11/08/2010 1058 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	22.95	0		meq/L	11/08/2010 1058 WN	SM 1030E
Anion Sum	22.15	0		meq/L	11/08/2010 1058 WN	SM 1030E
Cation-Anion Balance	1.78	0		%	11/08/2010 1058 WN	SM 1030E
Radiochemistry						
Gross Alpha	48.1 ± 5.2	2		pCi/L	10/27/2010 947 SH	SM 7110B
Gross Beta	9.6 ± 3.7	3		pCi/L	10/27/2010 947 SH	SM 7110B
Radium 226 (Dissolved)	1.5 ± 0.2	0.2	B	pCi/L	10/23/2010 1717 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/26/2010 2013 TWP	Ga-Tech


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-001
Client Sample ID: 34-7 OZ
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 10:45:00 AM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/15/2010 1408 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/14/2010 1757 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/14/2010 1757 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/15/2010 1408 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/14/2010 1757 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/15/2010 1408 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/14/2010 1757 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/15/2010 1408 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/14/2010 1757 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/19/2010 946 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/14/2010 1757 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/15/2010 1408 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/14/2010 1757 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/14/2010 1757 MS	EPA 200.8
Uranium	0.028	0.001		mg/L	10/14/2010 1757 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/14/2010 1757 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/15/2010 1408 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/15/2010 1512 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/15/2010 1512 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-004
Client Sample ID: 34-7SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 3:10:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.30	s.u.			10/04/2010 1510	Field
Conductivity	1348	µm		hos/cm	10/04/2010 1510	Field
Dissolved Oxygen	3.10	mg		/L	10/04/2010 1510	Field
Dissolved Oxygen (pct)	36.8			%	10/04/2010 1510	Field
Redox Potential	+193	mV			10/04/2010 1510	Field
Turbidity	6.67	NT		U	10/04/2010 1510	Field
Temperature	18.7	°C			10/04/2010 1510	Field
Static Water Level	22.33	ft			10/04/2010 1510	Field
General Parameters						
pH	10.0	0.1		s.u.	10/06/2010 2052 KO	SM 4500 H B
Electrical Conductivity	1190	5		µmhos/cm	10/06/2010 2052 KO	SM 2510B
Total Dissolved Solids (180)	690	10		mg/L	10/07/2010 1250 JF	SM 2540
Solids, Total Dissolved (Calc)	680	10		mg/L	10/12/2010 835 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	506	5		mg/L	10/06/2010 2052 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/11/2010 1510 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	223	5		mg/L	10/06/2010 2052 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	193	5		mg/L	10/06/2010 2052 KO	SM 2320B
Chloride	2	1		mg/L	10/06/2010 1824 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	10/07/2010 1831 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1511 AS	EPA 353.2
Sulfate	98	1		mg/L	10/06/2010 1824 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	10/06/2010 1456 DG	EPA 200.7
Magnesium	2	1		mg/L	10/06/2010 1456 DG	EPA 200.7
Potassium	13	1		mg/L	10/06/2010 1456 DG	EPA 200.7
Sodium	259	1		mg/L	10/06/2010 1456 DG	EPA 200.7

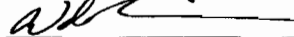
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-004
Client Sample ID: 34-7SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 3:10:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	3.66	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Carbonate as CO ₃	6.44	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Chloride	0.06	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sulfate	2.04	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Calcium	0.13	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Magnesium	0.14	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Potassium	0.32	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Sodium	11.27	0.01		meq/L	10/12/2010 835 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	11.88	0		meq/L	10/12/2010 835 KO	SM 1030E
Anion Sum	12.24	0		meq/L	10/12/2010 835 KO	SM 1030E
Cation-Anion Balance	1.46	0		%	10/12/2010 835 KO	SM 1030E
Radio Chemistry						
Gross Alpha	2.4 ± 1.2	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	7.1 ± 1.9	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/16/2010 2200 SH	Ra-05

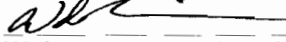
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010073002
(Replaces S1010073001)

Project: ROSS/STRATA/09142
Lab ID: S1010073-004
Client Sample ID: 34-7SA
COC: 131445

Work Order: S1010073
Collection Date: 10/4/2010 3:10:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1456 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1226 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1226 MS	EPA 200.8
Boron	0.2	0.1		mg/L	10/06/2010 1456 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1226 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1456 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1226 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1456 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1226 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 929 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1226 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1456 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1226 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1226 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1226 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1226 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1456 DG	EPA 200.7
Total Metals						
Iron	0.15	0.05		mg/L	10/08/2010 1353 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/08/2010 1353 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-003
Client Sample ID: 34-7 SM
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 2:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.04	s.u.			10/13/2010 1430	Field
Conductivity	2080	µm		hos/cm	10/13/2010 1430	Field
Dissolved Oxygen	5.38	mg		/L	10/13/2010 1430	Field
Dissolved Oxygen (pct)	53.4			%	10/13/2010 1430	Field
Redox Potential	+174	mV			10/13/2010 1430	Field
Turbidity	1.93	NT		U	10/13/2010 1430	Field
Temperature	12.8	°C			10/13/2010 1430	Field
Static Water Level	56.18	ft			10/13/2010 1430	Field
General Parameters						
pH	8.9	0.1		s.u.	10/15/2010 2227 KO	SM 4500 H B
Electrical Conductivity	1830	5		µmhos/cm	10/15/2010 2227 KO	SM 2510B
Total Dissolved Solids (180)	1260	10		mg/L	10/18/2010 1715 JF	SM 2540
Solids, Total Dissolved (Calc)	1140	10		mg/L	10/28/2010 1838 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	658	5		mg/L	10/15/2010 2227 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	10/25/2010 1449 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	682	5		mg/L	10/15/2010 2227 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	60	5		mg/L	10/15/2010 2227 KO	SM 2320B
Chloride	3	1		mg/L	10/15/2010 2134 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	10/15/2010 2227 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/22/2010 1006 AS	EPA 353.2
Sulfate	300	1		mg/L	10/15/2010 2134 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	10/15/2010 1412 DG	EPA 200.7
Magnesium	1	1		mg/L	10/15/2010 1412 DG	EPA 200.7
Potassium	10	1		mg/L	10/15/2010 1412 DG	EPA 200.7
Sodium	431	1		mg/L	10/15/2010 1412 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010

Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-003
Client Sample ID: 34-7 SM
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 2:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.17	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Carbonate as CO ₃	1.98	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Chloride	0.07	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Fluoride	0.04	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Sulfate	6.23	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Calcium	0.10	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Magnesium	0.11	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Potassium	0.24	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Sodium	18.74	0.01		meq/L	10/28/2010 1838 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	19.20	0		meq/L	10/28/2010 1838 WN	SM 1030E
Anion Sum	19.51	0		meq/L	10/28/2010 1838 WN	SM 1030E
Cation-Anion Balance	0.80	0		%	10/28/2010 1838 WN	SM 1030E
Radiochemistry						
Gross Alpha	10.1 ± 2.9	2		pCi/L	10/27/2010 947 SH	SM 7110B
Gross Beta	9.7 ± 3.7	3		pCi/L	10/27/2010 947 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/23/2010 1717 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/27/2010 1725 TWP	Ga-Tech

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 11/8/2010
Report ID: S1010215003
(Replaces S1010215002)

Project: ROSS/STRATA/09142
Lab ID: S1010215-003
Client Sample ID: 34-7 SM
COC: 137085

Work Order: S1010215
Collection Date: 10/13/2010 2:30:00 PM
Date Received: 10/14/2010 3:39:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/15/2010 1412 DG	EPA 200.7
Arsenic	0.008	0.005		mg/L	10/14/2010 1804 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/14/2010 1804 MS	EPA 200.8
Boron	0.6	0.1		mg/L	10/15/2010 1412 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/14/2010 1804 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/15/2010 1412 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/14/2010 1804 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/15/2010 1412 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/14/2010 1804 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/19/2010 956 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/14/2010 1804 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/15/2010 1412 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/14/2010 1804 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/14/2010 1804 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	10/14/2010 1804 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/14/2010 1804 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/15/2010 1412 DG	EPA 200.7
Total Metals						
Iron	0.06	0.05		mg/L	10/15/2010 1524 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	10/15/2010 1524 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-004
Client Sample ID: 42-19 DM
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 5:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.47	s.u.			10/05/2010 1735	Field
Conductivity	2260	µm		hos/cm	10/05/2010 1735	Field
Dissolved Oxygen	7.32	mg		/L	10/05/2010 1735	Field
Dissolved Oxygen (pct)	74.8			%	10/05/2010 1735	Field
Redox Potential	-11	mV			10/05/2010 1735	Field
Turbidity	2.26	NT		U	10/05/2010 1735	Field
Temperature	14.5	°C			10/05/2010 1735	Field
General Parameters						
pH	9.3	0.1		s.u.	10/08/2010 2041 KO	SM 4500 H B
Electrical Conductivity	2040	5		µmhos/cm	10/08/2010 2041 KO	SM 2510B
Total Dissolved Solids (180)	1170	10		mg/L	10/08/2010 1700 JF	SM 2540
Solids, Total Dissolved (Calc)	1150	10		mg/L	10/14/2010 740 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	443	5		mg/L	10/08/2010 2041 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/11/2010 1556 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	389	5		mg/L	10/08/2010 2041 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	74	5		mg/L	10/08/2010 2041 KO	SM 2320B
Chloride	385	1		mg/L	10/08/2010 1520 KO	EPA 300.0
Fluoride	1.4	0.1		mg/L	10/08/2010 2041 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1721 AS	EPA 353.2
Sulfate	7	1		mg/L	10/08/2010 1520 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	10/08/2010 1207 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/08/2010 1207 DG	EPA 200.7
Potassium	10	1		mg/L	10/08/2010 1207 DG	EPA 200.7
Sodium	480	1		mg/L	10/08/2010 1207 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-004
Client Sample ID: 42-19 DM
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 5:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.37	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Carbonate as CO ₃	2.48	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Chloride	10.87	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Fluoride	0.07	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sulfate	0.14	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Calcium	0.10	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Magnesium	ND	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Potassium	0.25	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sodium	20.86	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.22	0		meq/L	10/14/2010 740 KO	SM 1030E
Anion Sum	19.95	0		meq/L	10/14/2010 740 KO	SM 1030E
Cation-Anion Balance	3.09	0		%	10/14/2010 740 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	8.9 ± 4.1	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/24/2010 859 TWP	Ga-Tech

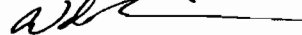
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-004
Client Sample ID: 42-19 DM
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 5:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1207 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1416 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1416 MS	EPA 200.8
Boron	0.8	0.1		mg/L	10/08/2010 1207 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1416 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1207 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1416 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1207 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1416 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 946 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1416 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1207 DG	EPA 200.7
Selenium	0.010	0.005		mg/L	10/07/2010 1416 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1416 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/07/2010 1416 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1416 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	10/08/2010 1207 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/10/2010 1107 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/10/2010 1107 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-001
Client Sample ID: 42-19 OZ
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 2:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.50	s.u.			10/05/2010 1435	Field
Conductivity	2410	µm		hos/cm	10/05/2010 1435	Field
Dissolved Oxygen	2.60	mg		/L	10/05/2010 1435	Field
Dissolved Oxygen (pct)	26.2			%	10/05/2010 1435	Field
Redox Potential	+257	mV			10/05/2010 1435	Field
Turbidity	0.50	NT		U	10/05/2010 1435	Field
Temperature	14.4	°C			10/05/2010 1435	Field
Static Water Level	300.62	ft			10/05/2010 1435	Field
General Parameters						
pH	8.7	0.1		s.u.	10/08/2010 1958 KO	SM 4500 H B
Electrical Conductivity	2130	5		µmhos/cm	10/08/2010 1958 KO	SM 2510B
Total Dissolved Solids (180)	1500	10		mg/L	10/08/2010 1645 JF	SM 2540
Solids, Total Dissolved (Calc)	1450	10		mg/L	10/14/2010 740 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	480	5		mg/L	10/08/2010 1958 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/11/2010 1553 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	533	5		mg/L	10/08/2010 1958 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	26	5		mg/L	10/08/2010 1958 KO	SM 2320B
Chloride	3	1		mg/L	10/08/2010 1453 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	10/08/2010 1958 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1718 AS	EPA 353.2
Sulfate	600	1		mg/L	10/08/2010 1453 KO	EPA 300.0
Cations						
Calcium	7	1		mg/L	10/08/2010 1200 DG	EPA 200.7
Magnesium	3	1		mg/L	10/08/2010 1200 DG	EPA 200.7
Potassium	7	1		mg/L	10/08/2010 1200 DG	EPA 200.7
Sodium	541	1		mg/L	10/08/2010 1200 DG	EPA 200.7

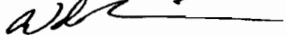
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-001
Client Sample ID: 42-19 OZ
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 2:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.74	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Carbonate as CO ₃	0.86	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Chloride	0.08	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sulfate	12.50	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Calcium	0.33	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Magnesium	0.20	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Potassium	0.17	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sodium	23.51	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.22	0		meq/L	10/14/2010 740 KO	SM 1030E
Anion Sum	22.20	0		meq/L	10/14/2010 740 KO	SM 1030E
Cation-Anion Balance	4.34	0		%	10/14/2010 740 KO	SM 1030E
Radio Chemistry						
Gross Alpha	19.6 ± 3.5	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	13.4 ± 4.0	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	1.4 ± 0.2	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/23/2010 1602 TWP	Ga-Tech


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-001
Client Sample ID: 42-19 OZ
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 2:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1200 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1406 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1406 MS	EPA 200.8
Boron	0.3	0.1		mg/L	10/08/2010 1200 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1406 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1200 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1406 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1200 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1406 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 940 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1406 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1200 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/07/2010 1406 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1406 MS	EPA 200.8
Uranium	0.009	0.001		mg/L	10/07/2010 1406 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1406 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1200 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/10/2010 1046 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/10/2010 1046 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-002
Client Sample ID: 42-19 OZ DUP
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 2:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.50	s.u.			10/05/2010 1435	Field
Conductivity	2410	µm		hos/cm	10/05/2010 1435	Field
Dissolved Oxygen	2.6	mg		/L	10/05/2010 1435	Field
Dissolved Oxygen (pct)	26.2			%	10/05/2010 1435	Field
Redox Potential	+257	mV			10/05/2010 1435	Field
Turbidity	0.50	NT		U	10/05/2010 1435	Field
Temperature	14.4	°C			10/05/2010 1435	Field
General Parameters						
pH	8.7	0.1		s.u.	10/08/2010 2009 KO	SM 4500 H B
Electrical Conductivity	2140	5		µmhos/cm	10/08/2010 2009 KO	SM 2510B
Total Dissolved Solids (180)	1550	10		mg/L	10/08/2010 1650 JF	SM 2540
Solids, Total Dissolved (Calc)	1450	10		mg/L	10/14/2010 740 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	483	5		mg/L	10/08/2010 2009 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/11/2010 1554 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	533	5		mg/L	10/08/2010 2009 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	27	5		mg/L	10/08/2010 2009 KO	SM 2320B
Chloride	3	1		mg/L	10/08/2010 1502 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	10/08/2010 2009 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1719 AS	EPA 353.2
Sulfate	607	1		mg/L	10/08/2010 1502 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	10/08/2010 1202 DG	EPA 200.7
Magnesium	2	1		mg/L	10/08/2010 1202 DG	EPA 200.7
Potassium	7	1		mg/L	10/08/2010 1202 DG	EPA 200.7
Sodium	533	1		mg/L	10/08/2010 1202 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-002
Client Sample ID: 42-19 OZ DUP
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 2:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.74	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Carbonate as CO ₃	0.91	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Chloride	0.08	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sulfate	12.63	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Calcium	0.32	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Magnesium	0.20	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Potassium	0.16	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sodium	23.19	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.88	0		meq/L	10/14/2010 740 KO	SM 1030E
Anion Sum	22.39	0		meq/L	10/14/2010 740 KO	SM 1030E
Cation-Anion Balance	3.23	0		%	10/14/2010 740 KO	SM 1030E
Radio Chemistry						
Gross Alpha	17.4 ± 3.4	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	11.5 ± 3.9	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	1.3 ± 0.2	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/23/2010 1859 TWP	Ga-Tech

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-002
Client Sample ID: 42-19 OZ DUP
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 2:35:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1202 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1409 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1409 MS	EPA 200.8
Boron	0.3	0.1		mg/L	10/08/2010 1202 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1409 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1202 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1409 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1202 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1409 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 942 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1409 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1202 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/07/2010 1409 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1409 MS	EPA 200.8
Uranium	0.010	0.001		mg/L	10/07/2010 1409 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1409 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1202 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/10/2010 1050 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/10/2010 1050 DG	EPA 200.7

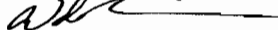
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-003
Client Sample ID: 42-19 SM
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 4:55:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	10.69	s.u.			10/05/2010 1655	Field
Conductivity	1839	µm		hos/cm	10/05/2010 1655	Field
Dissolved Oxygen	7.06	mg		/L	10/05/2010 1655	Field
Dissolved Oxygen (pct)	73.8			%	10/05/2010 1655	Field
Redox Potential	+220	mV			10/05/2010 1655	Field
Turbidity	2.93	NT		U	10/05/2010 1655	Field
Temperature	15.4	°C			10/05/2010 1655	Field
General Parameters						
pH	10.3	0.1		s.u.	10/08/2010 2020 KO	SM 4500 H B
Electrical Conductivity	1620	5		µmhos/cm	10/08/2010 2020 KO	SM 2510B
Total Dissolved Solids (180)	1040	10		mg/L	10/08/2010 1655 JF	SM 2540
Solids, Total Dissolved (Calc)	950	10		mg/L	10/14/2010 740 KO	SM 1030E
Alkalinity, Total (As CaCO3)	319	5		mg/L	10/08/2010 2020 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.8	0.1		mg/L	10/11/2010 1555 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	64	5		mg/L	10/08/2010 2020 KO	SM 2320B
Alkalinity, Carbonate as CO3	160	5		mg/L	10/08/2010 2020 KO	SM 2320B
Chloride	4	1		mg/L	10/08/2010 1511 KO	EPA 300.0
Fluoride	1.4	0.1		mg/L	10/08/2010 2020 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1720 AS	EPA 353.2
Sulfate	414	1		mg/L	10/08/2010 1511 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	10/08/2010 1204 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/08/2010 1204 DG	EPA 200.7
Potassium	11	1		mg/L	10/08/2010 1204 DG	EPA 200.7
Sodium	323	1		mg/L	10/08/2010 1204 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-003
Client Sample ID: 42-19 SM
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 4:55:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	1.04	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Carbonate as CO ₃	5.34	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Chloride	0.11	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Fluoride	0.07	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sulfate	8.61	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Calcium	0.05	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Magnesium	ND	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Potassium	0.29	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Sodium	14.06	0.01		meq/L	10/14/2010 740 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	14.41	0		meq/L	10/14/2010 740 KO	SM 1030E
Anion Sum	15.18	0		meq/L	10/14/2010 740 KO	SM 1030E
Cation-Anion Balance	2.58	0		%	10/14/2010 740 KO	SM 1030E
Radio Chemistry						
Gross Alpha	2.8 ± 2.1	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	6.0 ± 4.0	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/24/2010 602 TWP	Ga-Tech

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/29/2010
Report ID: S1010107002
(Replaces S1010107001)

Project: STRATA/ROSS/09142
Lab ID: S1010107-003
Client Sample ID: 42-19 SM
COC: 137047

Work Order: S1010107
Collection Date: 10/5/2010 4:55:00 PM
Date Received: 10/6/2010 8:05:00 AM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1204 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1413 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1413 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/08/2010 1204 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1413 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1204 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1413 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1204 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1413 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 944 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1413 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1204 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/07/2010 1413 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1413 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/07/2010 1413 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1413 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	10/08/2010 1204 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/10/2010 1104 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/10/2010 1104 DG	EPA 200.7

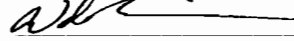
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-002
Client Sample ID: SA 43-18-1
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 10:50:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.77	s.u.			09/22/2010 1050	Field
Conductivity	7580	µmhos/cm			09/22/2010 1050	Field
Dissolved Oxygen	6.03	mg/L			09/22/2010 1050	Field
Dissolved Oxygen (pct)	53.0			%	09/22/2010 1050	Field
Turbidity	604	NT		U	09/22/2010 1050	Field
Temperature	9.1	°C			09/22/2010 1050	Field
Static Water Level	20.64	ft			09/22/2010 1050	Field
Oxygen Reduction Potential (ORP)	+223	mV			09/22/2010 1050	Field
General Parameters						
pH	8.2	0.1		s.u.	09/25/2010 1443 KO	SM 4500 H B
Electrical Conductivity	6810	5		µmhos/cm	09/25/2010 1443 KO	SM 2510B
Total Dissolved Solids (180)	6400	10		mg/L	09/23/2010 1345 AMB	SM 2540
Solids, Total Dissolved (Calc)	6090	10		mg/L	09/29/2010 914 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	456	5		mg/L	09/25/2010 1443 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/06/2010 1447 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	556	5		mg/L	09/25/2010 1443 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	09/25/2010 1443 KO	SM 2320B
Chloride	53	1		mg/L	09/24/2010 1126 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	09/27/2010 1357 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	2.1	0.1		mg/L	10/06/2010 955 AS	EPA 353.2
Sulfate	3960	1		mg/L	09/24/2010 1126 KO	EPA 300.0
Cations						
Calcium	327	1		mg/L	09/27/2010 1217 DG	EPA 200.7
Magnesium	173	1		mg/L	09/27/2010 1217 DG	EPA 200.7
Potassium	28	1		mg/L	09/27/2010 1217 DG	EPA 200.7
Sodium	1270	1		mg/L	09/27/2010 1217 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-002
Client Sample ID: SA 43-18-1
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 10:50:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.12	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Chloride	1.50	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Sulfate	82.49	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Calcium	16.30	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Magnesium	14.27	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Potassium	0.70	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Sodium	55.36	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	86.65	0		meq/L	09/29/2010 914 KO	SM 1030E
Anion Sum	93.12	0		meq/L	09/29/2010 914 KO	SM 1030E
Cation-Anion Balance	3.59	0		%	09/29/2010 914 KO	SM 1030E
Radio Chemistry						
Gross Alpha	83.7 ± 13.0	2		pCi/L	10/02/2010 2207 SH	SM 7110B
Gross Beta	46.6 ± 9.8	3		pCi/L	10/02/2010 2207 SH	SM 7110B
Radium 226 (Dissolved)	0.7 ± 0.1	0.2		pCi/L	10/11/2010 1234 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/11/2010 316 SH	Ra-05

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	<ul style="list-style-type: none">• Value exceeds Maximum Contaminant LevelE Value above quantitation rangeJ Analyte detected below quantitation limitsM Value exceeds Monthly Ave or MCLO Outside the Range of Dilutions	<ul style="list-style-type: none">B Analyte detected in the associated Method BlankH Holding times for preparation or analysis exceededL Analyzed by a contract laboratoryND Not Detected at the Reporting LimitS Spike Recovery outside accepted recovery limits
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-002
Client Sample ID: SA 43-18-1
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 10:50:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

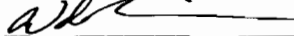
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/27/2010 1217 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	09/23/2010 1706 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/23/2010 1706 MS	EPA 200.8
Boron	ND	0.1		mg/L	09/27/2010 1217 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/23/2010 1706 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/27/2010 1217 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/23/2010 1706 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/27/2010 1217 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/23/2010 1706 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/24/2010 751 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/23/2010 1706 MS	EPA 200.8
Nickel	0.01	0.01		mg/L	09/27/2010 1217 DG	EPA 200.7
Selenium	0.053	0.005		mg/L	09/23/2010 1706 MS	EPA 200.8
Silver	ND	0.003		mg/L	09/23/2010 1706 MS	EPA 200.8
Uranium	0.063	0.001		mg/L	09/23/2010 1706 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/23/2010 1706 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/27/2010 1217 DG	EPA 200.7
Total Metals						
Iron	24.3	0.05		mg/L	09/27/2010 1947 DG	EPA 200.7
Manganese	0.90	0.02		mg/L	09/27/2010 1947 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-003
Client Sample ID: SA 43-18-2
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 11:55:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.79		s.u.		09/22/2010 1155	Field
Conductivity	5630		µmhos/cm		09/22/2010 1155	Field
Dissolved Oxygen	5.71		mg/L		09/22/2010 1155	Field
Dissolved Oxygen (pct)	51.2			%	09/22/2010 1155	Field
Turbidity	OR		NT	U	09/22/2010 1155	Field
Temperature	10.0		°C		09/22/2010 1155	Field
Static Water Level	12.38		ft		09/22/2010 1155	Field
Oxygen Reduction Potential (ORP)	+141		mV		09/22/2010 1155	Field
General Parameters						
pH	8.3	0.1		s.u.	09/25/2010 1459 KO	SM 4500 H B
Electrical Conductivity	5080	5		µmhos/cm	09/25/2010 1459 KO	SM 2510B
Total Dissolved Solids (180)	4190	10		mg/L	09/23/2010 1355 AMB	SM 2540
Solids, Total Dissolved (Calc)	3770	10		mg/L	09/29/2010 914 KO	SM 1030E
Alkalinity, Total (As CaCO3)	549	5		mg/L	09/25/2010 1459 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/06/2010 1448 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	670	5		mg/L	09/25/2010 1459 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	09/25/2010 1459 KO	SM 2320B
Chloride	134	1		mg/L	09/24/2010 1136 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	09/27/2010 1400 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	4.5	0.1		mg/L	10/06/2010 956 AS	EPA 353.2
Sulfate	2100	1		mg/L	09/24/2010 1136 KO	EPA 300.0
Cations						
Calcium	155	1		mg/L	09/27/2010 1219 DG	EPA 200.7
Magnesium	110	1		mg/L	09/27/2010 1219 DG	EPA 200.7
Potassium	35	1		mg/L	09/27/2010 1219 DG	EPA 200.7
Sodium	908	1		mg/L	09/27/2010 1219 DG	EPA 200.7

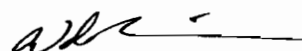
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-003
Client Sample ID: SA 43-18-2
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 11:55:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.98	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Chloride	3.77	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Sulfate	43.66	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Calcium	7.74	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Magnesium	9.03	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Potassium	0.88	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Sodium	39.49	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	57.16	0		meq/L	09/29/2010 914 KO	SM 1030E
Anion Sum	58.44	0		meq/L	09/29/2010 914 KO	SM 1030E
Cation-Anion Balance	1.10	0		%	09/29/2010 914 KO	SM 1030E
Radio Chemistry						
Gross Alpha	115 ± 12.8	2		pCi/L	10/02/2010 2207 SH	SM 7110B
Gross Beta	83.7 ± 10.5	3		pCi/L	10/02/2010 2207 SH	SM 7110B
Radium 226 (Dissolved)	0.5 ± 0.1	0.2		pCi/L	10/11/2010 1234 SH	SM 7500-Ra B
Radium 228 (Dissolved)	2.5 ± 0.8	1		pCi/L	10/11/2010 316 SH	Ra-05

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-003
Client Sample ID: SA 43-18-2
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 11:55:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/27/2010 1219 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	09/23/2010 1709 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/23/2010 1709 MS	EPA 200.8
Boron	ND	0.1		mg/L	09/27/2010 1219 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/23/2010 1709 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/27/2010 1219 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/23/2010 1709 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/27/2010 1219 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/23/2010 1709 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/24/2010 756 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/23/2010 1709 MS	EPA 200.8
Nickel	0.01	0.01		mg/L	09/27/2010 1219 DG	EPA 200.7
Selenium	0.402	0.005		mg/L	09/23/2010 1709 MS	EPA 200.8
Silver	ND	0.003		mg/L	09/23/2010 1709 MS	EPA 200.8
Uranium	0.146	0.001		mg/L	09/23/2010 1709 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/23/2010 1709 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/27/2010 1219 DG	EPA 200.7
Total Metals						
Iron	39.8	0.05		mg/L	09/27/2010 1949 DG	EPA 200.7
Manganese	1.10	0.02		mg/L	09/27/2010 1949 DG	EPA 200.7

These results apply only to the samples tested.

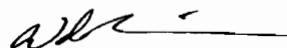
RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:


Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-001
Client Sample ID: SA 43-18-3
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 9:45:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.89	s.u.			09/22/2010 945	Field
Conductivity	754	µmhos/cm			09/22/2010 945	Field
Dissolved Oxygen	2.67	mg/L			09/22/2010 945	Field
Dissolved Oxygen (pct)	24.9			%	09/22/2010 945	Field
Turbidity	210	NT		U	09/22/2010 945	Field
Temperature	9.1	°C			09/22/2010 945	Field
Static Water Level	16.10	ft			09/22/2010 945	Field
Oxygen Reduction Potential (ORP)	+255	mV			09/22/2010 945	Field
General Parameters						
pH	8.4	0.1		s.u.	09/25/2010 1428 KO	SM 4500 H B
Electrical Conductivity	632	5		µmhos/cm	09/25/2010 1428 KO	SM 2510B
Total Dissolved Solids (180)	420	10		mg/L	09/23/2010 1340 AMB	SM 2540
Solids, Total Dissolved (Calc)	380	10		mg/L	09/29/2010 914 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	310	5		mg/L	09/25/2010 1428 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/06/2010 1446 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	370	5		mg/L	09/25/2010 1428 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	09/25/2010 1428 KO	SM 2320B
Chloride	1	1		mg/L	09/24/2010 1117 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	09/27/2010 1353 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	10/06/2010 954 AS	EPA 353.2
Sulfate	45	1		mg/L	09/24/2010 1117 KO	EPA 300.0
Cations						
Calcium	20	1		mg/L	09/27/2010 1215 DG	EPA 200.7
Magnesium	12	1		mg/L	09/27/2010 1215 DG	EPA 200.7
Potassium	4	1		mg/L	09/27/2010 1215 DG	EPA 200.7
Sodium	115	1		mg/L	09/27/2010 1215 DG	EPA 200.7

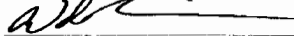
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-001
Client Sample ID: SA 43-18-3
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 9:45:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.06	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Chloride	0.03	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Sulfate	0.92	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Calcium	0.97	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Magnesium	1.00	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Potassium	0.10	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Sodium	4.99	0.01		meq/L	09/29/2010 914 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	7.07	0		meq/L	09/29/2010 914 KO	SM 1030E
Anion Sum	7.20	0		meq/L	09/29/2010 914 KO	SM 1030E
Cation-Anion Balance	0.88	0		%	09/29/2010 914 KO	SM 1030E
Radio Chemistry						
Gross Alpha	18.0 ± 2.3	2		pCi/L	10/02/2010 2207 SH	SM 7110B
Gross Beta	15.5 ± 2.1	3		pCi/L	10/02/2010 2207 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/11/2010 1234 SH	SM 7500-Ra B
Radium 228 (Dissolved)	2.2 ± 0.8	1		pCi/L	10/11/2010 316 SH	Ra-05

These results apply only to the samples tested.

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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/20/2010
Report ID: S1009429001

Project: ROSS-ISR/09142
Lab ID: S1009429-001
Client Sample ID: SA 43-18-3
COC: 131436

Work Order: S1009429
Collection Date: 9/22/2010 9:45:00 AM
Date Received: 9/22/2010 3:30:00 PM
Sampler: JR
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/27/2010 1215 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	09/23/2010 1655 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/23/2010 1655 MS	EPA 200.8
Boron	ND	0.1		mg/L	09/27/2010 1215 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/23/2010 1655 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/27/2010 1215 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/23/2010 1655 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/27/2010 1215 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/23/2010 1655 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/24/2010 000 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/23/2010 1655 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/27/2010 1215 DG	EPA 200.7
Selenium	ND	0.005		mg/L	09/23/2010 1655 MS	EPA 200.8
Silver	ND	0.003		mg/L	09/23/2010 1655 MS	EPA 200.8
Uranium	0.010	0.001		mg/L	09/23/2010 1655 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/23/2010 1655 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/27/2010 1215 DG	EPA 200.7
Total Metals						
Iron	4.67	0.05		mg/L	09/27/2010 1945 DG	EPA 200.7
Manganese	0.13	0.02		mg/L	09/27/2010 1945 DG	EPA 200.7

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O Outside the Range of Dilutions

RL - Reporting Limit

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S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 19XX18

Date: 8-6-09

Time: 1300

Landowner

Name: MERIT Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Photos

Picture #

Photo Roll

6, 7 well 789V
where sample
was taken

Picture #(s) 8 well 19XX18

Injection well - ✓

Stock _____

Domestic _____

SEO Permitted Facility Name: Deadman Creek
Unit 565 IND

Permit No. P67747W

Location (Decimal Degrees)

Lat 44.57188

Long 104.95374

Elev. 4265

GEOXH

503674.43E

4935393.70N

4108.2'

Water Quality

pH 8.49

Cond. 2790

Temp. °C 14.2

Water Level (ft): _____

% Combustible Gas: _____

Comments: 19XX
Well 789V water is piped to well 789V and
connected for injection. There is a water spike on the
line from well 19XX. No way to get water sample from
well 789V. Turbidity = 0.77 NTU, D.O. = 3.65 mg/l.

789V WELL GEOXH
4146.7'
503453.84E
4935423.91N

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS WELLOI

Date: 8-6-09

Time: 0930

Landowner

Name: Carol Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr NW NW

SEC 20

TWN 58

RNG 67

Photos

Photo Roll _____

Stock _____

Picture #(s) 1,2

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat 44.56977

Long 104.94041

Elev. 4182

GEO XH

504728.51E

4935161.55N

4111.4'

Water Quality

pH 7.94

Cond. 2770

Temp. °C 17.3°C

Water Level (ft): 148.8' % Combustible Gas: _____

Comments: Carol's House well (log house) - Turbidity = 0.54 NTU

D.O. = 1.38 mg/L. Water clear - no odor or gas
noted.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS Well 03

Date: 8-7-09

Time: 0730

Landowner

Name: Carol Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr NENE

SEC 30

TWN 53

RNG 67

Photos

Photo Roll _____

Stock ☒

Picture #(s) 1, 2

Domestic _____

SEO Permitted Facility Name: Ray W. Robinson
120

Permit No. P619W

Location (Decimal Degrees)

Lat 44.55488

Long 104.94766

Elev. 4268

GEO XH

504/55.49 E

4933507.33 N

4206.3

Water Quality

pH _____

Cond. _____

Temp. °C _____

Water Level (ft): _____

% Combustible Gas: _____

Comments: Could not get well to pump water. Ranch hand
(Whitney) was not sure if it worked or not. We need to
ask Carol later.

~~XXXXXXXXXX~~

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: DW WELL 01 Date: 8-27-09 Time: 1400

Landowner

Name: Dale Wood

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) # 1, # 2

Stock _____

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat 44.58007

GEO XH

Long 104.93779

Elev. 4193

4123.7

Water Quality

pH 8.21

Cond. 2980

Temp. °C 14.8°C

Turbidity (ntu) 27.5 NTU

D.O. (mg/L) 2.70 mg/L / 30.2%

GPM - App. 8

Start 1:50 PM - Purged for 15 MIN.

Water Level (ft): Could not get % Combustible Gas: _____

Casing Height (ft): below surface element - Ambient Air Temp: 27°C
non

Comments: Well in Culvert six feet deep +. Started
purging and ~~water~~ water was really
black (iron bacteria?) Cleared up after 15 min
purging but sample still had slight black in
it. No odor with alot of air when first started

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HO WELL 01

Date: 8-3-09

Time: 0830

Landowner

Name: Harry BERGER

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Photos

Photo Roll _____

Stock ☒ Windmill

Picture #(s) 1

Domestic _____

SEO Permitted Facility Name: Harry J. Berger 207 Permit No. P7328P

Location (Decimal Degrees)

Lat 44.61390

Long 104.94557

Elev. 4176

GEO X 11

504313.21 E

4940046.93 N

4113.5'

Water Quality

pH 7.52

Cond. 706

Temp. °C 11.0°

Water Level (ft): 41.3'

% Combustible Gas: _____

Comments: Windmill - Turbidity = 7.24 - DO = 63.9%
No smell or gas present.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 03

Date: 8-3-09

Time: 1300

Landowner

Name: Harry BERGER

Address _____

Phone# _____

Legal Location

Qtr/Qtr SESE

SEC 5

TWN 53

RNG 67

Photos

Photo Roll _____

Stock ☒

Picture #(s) 5

Domestic _____

SEO Permitted Facility Name: Harry J. Berger 160

Permit No. P7324P

Location (Decimal Degrees)

Lat 44.60054

Long 104.93921

Elev. 4134

GEO X4

504822.29E

4938582.04 N

4040.7

Water Quality

pH 7.62

Cond. 1542

Temp. °C 10.1°C

Water Level (ft): Could not get

% Combustible Gas: _____

Comments: Turb. = 5.06 NTU D.O. = 25.5% - Water had slight yellow/red tinge to it - No smell. Plugged in pump for water inside house

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELLO4

Date: 8-3-09

Time: 1400

Landowner

Name: Harry Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Photos

Photo Roll _____

Stock ☒

Picture #(s) 6 well / 7 hydrant

Domestic _____

SEO Permitted Facility Name: Harry J. Berger 100 Permit No. P7326P

Location (Decimal Degrees)

Lat 44.59999

Long 104.93561

Elev. 4110

GEO XH

505112.27E

4938518.70

4037.9

Water Quality

pH 7.44

Cond. 1477

Temp. °C 10.2

Water Level (ft): Could not get % Combustible Gas: _____

Comments: Turbidity = 7.74 NTU, D.O. = 41.7% - slight
rust color. - no odor or gas noted

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 04 Date: 9-1-09 Time: 1300
RESAMPLE

Landowner

Name: Harry Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ✓

Domestic ✓

SEO Permitted Facility Name: Harry J. Berger Permit No. P 7326P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.36

Cond. 1295

Temp. °C 10.3

Turbidity (ntu) 2.18

D.O. (mg/L) _____

Water Level (ft): _____ % Combustible Gas: _____

Casing Height (ft): _____ Ambient Air Temp: 30.7°C

Comments: Resample for Gross-Alpha - Used 2 1/2 Gal.
and 1 raw bottle for sample. let purge for 15 min.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELLOS

Date: 8-4-09

Time: 1100

Landowner

Name: Harry Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr NENW ?

SEC 17 ~~18~~ ?

TWN 53

RNG 67

Photos

Photo Roll 1

Stock ☒

Picture #(s) _____

Domestic ☒

SEO Permitted Facility Name: Dell B. Evans

Permit No. P 7430 P ?

Location (Decimal Degrees)

Lat 44.58575

Long 104.93720

Elev. 4139

GEO XH

504982.97E

4936934.65N

4060.7'

Water Quality

pH 7.64

Cond. 1343

Temp. °C 12.6°C

Water Level (ft): Could not get

% Combustible Gas: _____

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P17177W Date: 8-27-09 Time: 1745

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) 7

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P17177W

Location (Decimal Degrees)

Lat 44.60903 Geo X4

Long 104.97664

Elev. 4213 4136.5'

GPM = 18 sec/46AL

Let run for 15 min.

Water Quality

pH 7.40

Cond. 794

Temp. °C 10.1°C

Turbidity (ntu) 0.37

D.O. (mg/L) —

Water Level (ft): No Access

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 28.9°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P31770W
P98245W Date: 9-3-09 Time: 1430

Landowner Name: Clint & Twitter Westover Legal Location Qtr/Qtr _____

Address _____ SEC _____

Phone# _____ TWN _____

RNG _____

Picture #(s) 5-P31770W
6-P98245W Stock _____
7-Hydrant Domestic ☒

SEO Permitted Facility Name: _____ Permit No. P31770W
P98245W

Location (Decimal Degrees) P31770W P98245W Water Quality
Lat 44.52367 44.52328 pH 7.85

Long 104.95644 104.95724 Cond. 1910

Elev. 4272 4253 Temp. °C 12.0

Turbidity (ntu) 0.02

D.O. (mg/L) _____

Water Level (ft): ~~42.00~~ % Combustible Gas: _____
P31770W 1.05'

Casing Height (ft): ~~42.00~~ Ambient Air Temp: 32.4 °C
P98245W 0.6'

Comments: Well 31770 & 98245 are piped together
according to Twitter. Sampled both at hydrant.
Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P42868W Date: 8-31-09 Time: 0930

Landowner

Name: Hahn

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) 1

Stock ☒

Domestic ☒

SEO Permitted Facility Name: JAMES & BESSIE HAHN
P42868W

Permit No. P42868W

Location (Decimal Degrees)

Lat 44.57655

Long 104.99278

Elev. 4257

Water Quality

pH 8.71

Cond. 1167

Temp. °C 10.8

Turbidity (ntu) 1.71

D.O. (mg/L) _____

Water Level (ft): N/A - NO ACCESS % Combustible Gas: _____

Casing Height (ft): In shelter - 6' deep Ambient Air Temp: 22.2°C

Comments: Water Clear - no odor - Well on
East side of old house - Sampled from hydrant
next to well house.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50113W Date: 8/23/09 Time: 11:30

Landowner
Name: Stromy Beach
Address _____
Phone# _____

Legal Location
Qtr/Qtr SWNE
SEC 2
TWN 53
RNG 68

Picture #(s) 4

Stock ☒ - Water pump w/ T hole

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P50113W

Location (Decimal Degrees)
Lat 44.60972 GEO XH
Long 104.99187
Elev. 4232 4161.2'

Water Quality
pH 7.45
Cond. 1440
Temp. °C 9.5°C
Turbidity (ntu) 0.98
D.O. (mg/L) _____

GPM = 18

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): 2.35'

Ambient Air Temp: 20.3°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: PL1006W Date: 8-31-09 Time: 10:45

Landowner

Name: HAWN

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) 2

Stock ☒

Domestic ☒

SEO Permitted Facility Name: JOEL HAWN

Permit No. PL1006W

Location (Decimal Degrees)

Lat 44.57685

Long 105.02212

Elev. 4360

Water Quality

pH 7.83

Cond. 918

Temp. °C 12.9°C

Turbidity (ntu) 1.20

D.O. (mg/L) _____

Water Level (ft): N/A NO ACCESS

% Combustible Gas: _____

Casing Height (ft): IN SHELTER

Ambient Air Temp: 21.5°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P61007W Date: 8-31-09 Time: 1115

Landowner

Name: HAHN

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) 3, 4

Stock ✓

Domestic ✓

SEO Permitted Facility Name: SUEL HAHN

Permit No. P61007W

Location (Decimal Degrees)

Lat 44.57642

Long 105.02390

Elev. 4357

Water Quality

pH 8.63

Cond. 1065

Temp. °C 12.5°C

Turbidity (ntu) 1.45

D.O. (mg/L) _____

Water Level (ft): N/A NO ACCESS

% Combustible Gas: _____

Casing Height (ft): IN SHUTTER

Ambient Air Temp: 19.7°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P71008W Date: 8-27-09 Time: 1615

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) 5, 6, 7

Stock _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P71108W

Location (Decimal Degrees)

Lat 44.60775

GEOXH

Long 104.98550

Elev. 4219

4154'

GPM = 21.44 sec/46AL

Let run for 5 min

Water Quality

pH 7.53

Cond. 1731

Temp. °C 13.0°C

Turbidity (ntu) 1.86

D.O. (mg/L) —

Water Level (ft): No Access

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 29.1°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P78287W Date: 9-1-09 Time: 1210

Landowner PASTOR BERG
Name: DSHOTO COMM. BIBLE CHURCH

Legal Location
Qtr/Qtr _____

Address _____

SEC _____

Phone# _____

TWN _____

RNG _____

Picture #(s) 5

Stock _____

Domestic ☒

SEO Permitted Facility Name: DSHOTO COMM.
BIBLE CHURCH

Permit No. P78287W

Location (Decimal Degrees)

Lat 44.58917

Water Quality
pH 7.72

Long -104.91673

Cond. 737

Elev. 4170

Temp. °C 16.1

Turbidity (ntu) 6.95 0.74

D.O. (mg/L) _____

Water Level (ft): NO ACCESS

% Combustible Gas: _____

Casing Height (ft): NO ACCESS

Ambient Air Temp: 30.7°C

Comments: WELL IS LOCATED NORTH OF HOUSE - NO ACCESS
TO WELL HEAD - SAMPLED FROM OUTSIDE TAP ON HOUSE.
Pastor Berg said there water is stinky in the winter
months. He thought one well serves the house and
church..

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P8466SW Date: 8/28/09 Time: 12:00

Landowner
Name: Stacy Burt
Address _____
Phone# _____

Legal Location
Qtr/Qtr SWNW
SEC 2
TWN 53
RNG 68

Picture #(s) 5

Stock X - Windan Fu-off @ ARNTH

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P8466SW

Location (Decimal Degrees)
Lat 44.61075 GEO XH
Long 105.00078
Elev. 4290 ~~4191.2~~
4191.2

Water Quality
pH ~~7.1~~ 7.53
Cond. 804
Temp. °C 10.4
Turbidity (ntu) 25.0
D.O. (mg/L) _____

Water Level (ft): N/A - No Access

% Combustible Gas: —

Casing Height (ft): 2.40

Ambient Air Temp: 23.5°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SB Well 01 Date: 8-27-09 Time: 1535 1600

Landowner

Name: ~~Stromy~~ & Becky Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) #3 ~~Well~~ Hydrant
#4 Hydrant / ~~Well~~ ~~Well~~

Stock _____

Domestic _____

SEO Permitted Facility Name: ?

Permit No. _____

Location (Decimal Degrees)

Lat 44.60835

GEO XH

Long 104.99364

Elev. 4257

4205.0'

Water Quality

pH 8.73

Cond. 1088

Temp. °C 14.4°C

Turbidity (ntu) 3.08

D.O. (mg/L) _____

GPM = 4 gal in 22 sec.
purged for 5 min.

Water Level (ft): Could not get

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 37.1°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: T.J. Wesley (TW01)

Date: 7-29-09

Time: 1000

Landowner

Name: T.J. Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Photos

Photo Roll _____

Stock _____

Picture #(s) 1, 2

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat 44.59158

Long 104.94632

Elev. 4190

Water Quality

pH 8.25

Cond. 1614

Temp. °C 11.6

Water Level (ft): 27.7'

% Combustible Gas: _____

Comments: T.J.'s house well. No smell or gas
noted

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW02

Date: 7-29-08

Time: _____

Landowner

Name: T.J. Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Photos

Photo Roll _____

Stock _____

Picture #(s) 3,4

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat 44.58743

Long 104.93854

Elev. 4134

GEO X14

5048 77.78

4937123.38

4055.2'

Water Quality

pH 8.15

Cond. 1922

Temp. °C 10.9

Water Level (ft): 20.4'

% Combustible Gas: _____



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0908115001

Project: Ross Project
Lab ID: S0908115-001
Client Sample ID: 19XX18
COC: 125601

Work Order: S0908115
Collection Date: 8/6/2009 1:00:00 PM
Date Received: 8/7/2009 2:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.49			s.u.	08/06/2009 1300	Field
Conductivity	2790			µmhos/cm	08/06/2009 1300	Field
Water Level	NA			ft	08/06/2009 1300	Field
Temperature	14.2			°C	08/06/2009 1300	Field
General Parameters						
pH	8.5	0.1		s.u.	08/24/2009 1322 CK	SM 4500 H B
Electrical Conductivity	2410	5		µmhos/cm	08/24/2009 1322 CK	SM 2510B
Total Dissolved Solids (180)	1730	10		mg/L	08/10/2009 1200 AMB	SM 2540
Solids, Total Dissolved (Calc)	1720	10		mg/L	09/09/2009 1553 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	656	5		mg/L	08/31/2009 1638 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/18/2009 1508 SK	EPA 350.1
Gross Alpha	227 ± 11	2		pCi/L	08/24/2009 1046 SH	SM 7110B
Gross Beta	52.3 ± 4.8	3		pCi/L	08/24/2009 1046 SH	SM 7110B
Radium 226	39.5 ± 1.3	0.2		pCi/L	08/17/2009 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/20/2009 2221 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	746	5		mg/L	08/31/2009 1638 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	27	5		mg/L	08/31/2009 1638 CK	SM 2320B
Chloride	6	1		mg/L	08/27/2009 1308 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	08/11/2009 121 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	08/13/2009 1545 SK	EPA 353.2
Sulfate	646	1		mg/L	08/27/2009 1308 KO	EPA 300.0
Cations						
Calcium	7	1		mg/L	08/31/2009 2122 DG	EPA 200.7
Magnesium	2	1		mg/L	08/31/2009 2122 DG	EPA 200.7
Potassium	5	1		mg/L	08/31/2009 2122 DG	EPA 200.7
Sodium	655	1		mg/L	08/31/2009 2122 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Page 1 of 10



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0908115001

Project: Ross Project
Lab ID: S0908115-001
Client Sample ID: 19XX18
COC: 125601

Work Order: S0908115
Collection Date: 8/6/2009 1:00:00 PM
Date Received: 8/7/2009 2:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.23	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Carbonate as CO ₃	0.89	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Chloride	0.18	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Fluoride	0.02	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Nitrate + Nitrite as N	0.03	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Sulfate	13.45	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Calcium	0.33	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Magnesium	0.19	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Potassium	0.11	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Sodium	28.50	0.01		meq/L	09/09/2009 1553 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	29.15	0		meq/L	09/09/2009 1553 WN	SM 1030E
Anion Sum	26.82	0		meq/L	09/09/2009 1553 WN	SM 1030E
Cation-Anion Balance	4.16	0		%	09/09/2009 1553 WN	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/10/2009 2358 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/10/2009 1133 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/10/2009 1133 MS	EPA 200.8
Boron	0.5	0.1		mg/L	08/10/2009 2358 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/10/2009 1133 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/10/2009 2358 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/10/2009 1133 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/10/2009 2358 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/10/2009 1133 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/11/2009 1239 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/10/2009 1133 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/10/2009 2358 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/10/2009 1133 MS	EPA 200.8
Uranium	0.086	0.001		mg/L	08/10/2009 1133 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/10/2009 1133 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/10/2009 2358 DG	EPA 200.7
Total Metals - 200.2						
Iron	ND	0.05		mg/L	08/11/2009 415 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/11/2009 415 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0908114001

Project: Ross Project
Lab ID: S0908114-002
Client Sample ID: CS Well 01 DuP
COC: 125600

Work Order: S0908114
Collection Date: 8/6/2009 10:30:00 AM
Date Received: 8/7/2009 2:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.10			s.u.	08/06/2009 1030	Field
Conductivity	2770			µmhos/cm	08/06/2009 1030	Field
Water Level	NA			ft	08/06/2009 1030	Field
Temperature	12.9			°C	08/06/2009 1030	Field
General Parameters						
pH	8.4	0.1		s.u.	08/24/2009 1309 CK	SM 4500 H B
Electrical Conductivity	2580	5		µmhos/cm	08/24/2009 1309 CK	SM 2510B
Total Dissolved Solids (180)	1930	10		mg/L	08/10/2009 1145 AMB	SM 2540
Solids, Total Dissolved (Calc)	1760	10		mg/L	09/01/2009 1424 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	640	5		mg/L	08/11/2009 037 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/18/2009 1505 SK	EPA 350.1
Gross Alpha	18.7 ± 3.5	2		pCi/L	08/16/2009 000 SH	SM 7110B
Gross Beta	9.2 ± 3.7	4		pCi/L	08/16/2009 000 SH	SM 7110B
Radium 226	0.68 ± 0.25	0.2		pCi/L	08/17/2009 000 SH	SM 7500-Ra B
Total Radium 228	1.49 ± 0.46	1		pCi/L	08/20/2009 2221 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	747	5		mg/L	08/11/2009 037 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	17	5		mg/L	08/11/2009 037 CK	SM 2320B
Chloride	6	1		mg/L	08/22/2009 1349 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	08/11/2009 037 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	08/13/2009 1536 SK	EPA 353.2
Sulfate	698	1		mg/L	08/22/2009 1349 KO	EPA 300.0
Cations						
Calcium	36	1		mg/L	08/10/2009 2346 DG	EPA 200.7
Magnesium	29	1		mg/L	08/10/2009 2346 DG	EPA 200.7
Potassium	12	1		mg/L	08/10/2009 2346 DG	EPA 200.7
Sodium	595	1		mg/L	08/10/2009 2346 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0908114001

Project: Ross Project
Lab ID: S0908114-002
Client Sample ID: CS Well 0201 D&P
COC: 125600

Work Order: S0908114
Collection Date: 8/6/2009 10:30:00 AM
Date Received: 8/7/2009 2:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.24	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Carbonate as CO ₃	0.55	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Chloride	0.16	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Nitrate + Nitrite as N	0.03	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Sulfate	14.54	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Calcium	1.76	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Magnesium	2.34	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Potassium	0.31	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Sodium	25.89	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	30.32	0		meq/L	09/01/2009 1424 KO	SM 1030E
Anion Sum	27.55	0		meq/L	09/01/2009 1424 KO	SM 1030E
Cation-Anion Balance	4.77	0		%	09/01/2009 1424 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/10/2009 2346 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/10/2009 1123 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/10/2009 1123 MS	EPA 200.8
Boron	0.4	0.1		mg/L	08/10/2009 2346 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/10/2009 1123 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/10/2009 2346 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/10/2009 1123 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/10/2009 2346 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/10/2009 1123 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/11/2009 1234 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/10/2009 1123 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/10/2009 2346 DG	EPA 200.7
Selenium	0.008	0.005		mg/L	08/10/2009 1123 MS	EPA 200.8
Uranium	0.020	0.001		mg/L	08/10/2009 1123 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/10/2009 1123 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/10/2009 2346 DG	EPA 200.7
Total Metals - 200.2						
Iron	ND	0.05		mg/L	08/11/2009 408 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	08/11/2009 408 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0908114001

Project: Ross Project
Lab ID: S0908114-001
Client Sample ID: CS Well 01
COC: 125600

Work Order: S0908114
Collection Date: 8/6/2009 9:30:00 AM
Date Received: 8/7/2009 2:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.94			s.u.	08/06/2009 930	Field
Conductivity	2770			µmhos/cm	08/06/2009 930	Field
Water Level	148.8			ft	08/06/2009 930	Field
Temperature	17.3			°C	08/06/2009 930	Field
General Parameters						
pH	8.3	0.1		s.u.	08/24/2009 1300 CK	SM 4500 H B
Electrical Conductivity	2560	5		µmhos/cm	08/24/2009 1300 CK	SM 2510B
Total Dissolved Solids (180)	1920	10		mg/L	08/10/2009 1140 AMB	SM 2540
Solids, Total Dissolved (Calc)	1830	10		mg/L	09/01/2009 1424 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	792	5		mg/L	08/31/2009 1654 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/18/2009 1504 SK	EPA 350.1
Gross Alpha	18.3 ± 3.4	2		pCi/L	08/16/2009 827 SH	SM 7110B
Gross Beta	11.3 ± 3.6	4		pCi/L	08/16/2009 827 SH	SM 7110B
Radium 226	0.86 ± 0.26	0.2		pCi/L	08/17/2009 000 SH	SM 7500-Ra B
Total Radium 228	1.66 ± 0.37	1		pCi/L	08/20/2009 1711 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	931	5		mg/L	08/31/2009 1654 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	18	5		mg/L	08/31/2009 1654 CK	SM 2320B
Chloride	6	1		mg/L	08/27/2009 1344 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	08/11/2009 021 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.4	0.1		mg/L	08/13/2009 1535 SK	EPA 353.2
Sulfate	688	1		mg/L	08/27/2009 1344 KO	EPA 300.0
Cations						
Calcium	39	1		mg/L	08/27/2009 1846 DG	EPA 200.7
Magnesium	30	1		mg/L	08/10/2009 2343 DG	EPA 200.7
Potassium	14	1		mg/L	08/27/2009 1846 DG	EPA 200.7
Sodium	574	1		mg/L	08/27/2009 1846 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

Page 1 of 8



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0908114001

Project: Ross Project
Lab ID: S0908114-001
Client Sample ID: CS Well 01
COC: 125600

Work Order: S0908114
Collection Date: 8/6/2009 9:30:00 AM
Date Received: 8/7/2009 2:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	15.26	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Carbonate as CO ₃	0.58	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Chloride	0.16	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Nitrate + Nitrite as N	0.03	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Sulfate	14.33	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Calcium	1.92	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Magnesium	2.43	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Potassium	0.35	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Sodium	24.95	0.01		meq/L	09/01/2009 1424 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	29.66	0		meq/L	09/01/2009 1424 KO	SM 1030E
Anion Sum	30.39	0		meq/L	09/01/2009 1424 KO	SM 1030E
Cation-Anion Balance	1.21	0		%	09/01/2009 1424 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/10/2009 2343 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/10/2009 1112 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/10/2009 1112 MS	EPA 200.8
Boron	0.4	0.1		mg/L	08/10/2009 2343 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/10/2009 1112 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/10/2009 2343 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/10/2009 1112 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/10/2009 2343 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/10/2009 1112 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/11/2009 1232 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/10/2009 1112 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/10/2009 2343 DG	EPA 200.7
Selenium	0.006	0.005		mg/L	08/10/2009 1112 MS	EPA 200.8
Uranium	0.014	0.001		mg/L	08/10/2009 1112 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/10/2009 1112 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/10/2009 2343 DG	EPA 200.7
Total Metals - 200.2						
Iron	ND	0.05		mg/L	08/11/2009 405 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	08/11/2009 405 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants

1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009

Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-001
Client Sample ID: DW Well 01
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 2:00:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.21			s.u.	08/27/2009 1400	Field
Conductivity	2980			µmhos/cm	08/27/2009 1400	Field
Dissolved Oxygen	2.70			mg/L	08/27/2009 1400	Field
Turbidity	27.5			NTU	08/27/2009 1400	Field
Temperature	14.8			°C	08/27/2009 1400	Field
General Parameters						
pH	8.4	0.1		s.u.	08/31/2009 1341 CK	SM 4500 H B
Electrical Conductivity	2690	5		µmhos/cm	08/31/2009 1341 CK	SM 2510B
Total Dissolved Solids (180)	1880	10		mg/L	08/31/2009 1155 AMB	SM 2540
Solids, Total Dissolved (Calc)	1760	10		mg/L	09/09/2009 1002 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	647	5		mg/L	08/31/2009 1341 CK	SM 2320B
Nitrogen, Ammonia (As N)	1.2	0.1		mg/L	09/09/2009 1112 SK	EPA 350.1
Gross Alpha	10.7 ± 2.8	2		pCi/L	09/09/2009 1056 SH	SM 7110B
Gross Beta	6.7 ± 3.7	3		pCi/L	09/09/2009 1056 SH	SM 7110B
Radium 226	0.35 ± 0.25	0.2		pCi/L	09/08/2009 1204 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/08/2009 2033 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	774	5		mg/L	08/31/2009 1341 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	8	5		mg/L	08/31/2009 1341 CK	SM 2320B
Chloride	16	1		mg/L	08/31/2009 2142 KO	EPA 300.0
Fluoride	0.7	0.1		mg/L	08/31/2009 1341 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/31/2009 1433 SK	EPA 353.2
Sulfate	690	1		mg/L	08/31/2009 2142 KO	EPA 300.0
Cations						
Calcium	16	1		mg/L	09/08/2009 2052 DG	EPA 200.7
Magnesium	6	1		mg/L	09/08/2009 2052 DG	EPA 200.7
Potassium	11	1		mg/L	09/08/2009 2052 DG	EPA 200.7
Sodium	629	1		mg/L	09/08/2009 2052 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009
Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-001
Client Sample ID: DW Well 01
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 2:00:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.68	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Carbonate as CO ₃	0.25	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Chloride	0.45	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sulfate	14.36	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Calcium	0.77	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Magnesium	0.47	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Potassium	0.27	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sodium	27.36	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	28.89	0		meq/L	09/09/2009 1002 KO	SM 1030E
Anion Sum	27.79	0		meq/L	09/09/2009 1002 KO	SM 1030E
Cation-Anion Balance	1.93	0		%	09/09/2009 1002 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/01/2009 1926 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/31/2009 1151 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/31/2009 1151 MS	EPA 200.8
Boron	0.6	0.1		mg/L	09/01/2009 1926 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/31/2009 1151 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/01/2009 1926 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/31/2009 1151 MS	EPA 200.8
Iron	1.96	0.05		mg/L	09/01/2009 1926 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/31/2009 1151 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/01/2009 1002 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/31/2009 1151 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/01/2009 1926 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/31/2009 1151 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/31/2009 1151 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/31/2009 1151 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/01/2009 1926 DG	EPA 200.7
Total Metals - 200.2						
Iron	5.02	0.05		mg/L	09/01/2009 2210 DG	EPA 200.7
Manganese	0.07	0.02		mg/L	09/01/2009 2210 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009
Report ID: S0908043002
(Replaces S0908043001)

Project: Strata Energy - Ross Project
Lab ID: S0908043-001
Client Sample ID: HB Well 01
COC: 125598

Work Order: S0908043
Collection Date: 8/3/2009 8:30:00 AM
Date Received: 8/4/2009 12:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.52			s.u.	08/03/2009 830	Field
Conductivity	706			µmhos/cm	08/03/2009 830	Field
Water Level	41.3			ft	08/03/2009 830	Field
Temperature	11.0			°C	08/03/2009 830	Field
General Parameters						
pH	8.0	0.1		s.u.	08/05/2009 000 CK	SM 4500 H B
Electrical Conductivity	732	5		µmhos/cm	08/05/2009 000 CK	SM 2510B
Total Dissolved Solids (180)	440	10		mg/L	08/05/2009 1450 MJH	SM 2540
Solids, Total Dissolved (Calc)	420	10		mg/L	08/20/2009 1523 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	343	5		mg/L	08/05/2009 1810 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/18/2009 1312 SK	EPA 350.1
Gross Alpha	5.8 ± 1.5	2		pCi/L	08/16/2009 827 SH	SM 7110B
Gross Beta	12.2 ± 2.1	3		pCi/L	08/16/2009 827 SH	SM 7110B
Radium 226	0.27 ± 0.22	0.2		pCi/L	08/12/2009 1506 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/13/2009 2004 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	419	5		mg/L	08/05/2009 1810 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/05/2009 1810 CK	SM 2320B
Chloride	6	1		mg/L	08/11/2009 252 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/05/2009 1810 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.6	0.1		mg/L	08/13/2009 1305 SK	EPA 353.2
Sulfate	53	1		mg/L	08/11/2009 252 KO	EPA 300.0
Cations						
Calcium	63	1		mg/L	08/05/2009 2138 DG	EPA 200.7
Magnesium	47	1		mg/L	08/05/2009 2138 DG	EPA 200.7
Potassium	14	1		mg/L	08/05/2009 2138 DG	EPA 200.7
Sodium	26	1		mg/L	08/05/2009 2138 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009
Report ID: S0908043002
(Replaces S0908043001)

Project: Strata Energy - Ross Project
Lab ID: S0908043-001
Client Sample ID: HB Well 01
COC: 125598

Work Order: S0908043
Collection Date: 8/3/2009 8:30:00 AM
Date Received: 8/4/2009 12:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.86	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Chloride	0.16	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Fluoride	ND	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Nitrate + Nitrite as N	0.11	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Sulfate	1.10	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Calcium	3.16	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Magnesium	3.83	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Potassium	0.36	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Sodium	1.11	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	8.46	0		meq/L	08/20/2009 1523 WN	SM 1030E
Anion Sum	8.24	0		meq/L	08/20/2009 1523 WN	SM 1030E
Cation-Anion Balance	1.29	0		%	08/20/2009 1523 WN	SM 1030E
Cation-Anion Difference	0.21	0		meq/L	08/20/2009 1523 WN	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/05/2009 2138 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/05/2009 1538 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/05/2009 1538 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/05/2009 2138 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/05/2009 1538 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/05/2009 2138 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/05/2009 1538 MS	EPA 200.8
Iron	0.21	0.05		mg/L	08/05/2009 2138 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/05/2009 1538 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/07/2009 1222 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/05/2009 1538 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/05/2009 2138 DG	EPA 200.7
Selenium	0.006	0.005		mg/L	08/05/2009 1538 MS	EPA 200.8
Uranium	0.010	0.001		mg/L	08/05/2009 1538 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/05/2009 1538 MS	EPA 200.8
Zinc	0.18	0.01		mg/L	08/05/2009 2138 DG	EPA 200.7
Total Metals - 200.2						
Iron	0.80	0.05		mg/L	08/07/2009 1757 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/07/2009 1757 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009
Report ID: S0908043002
(Replaces S0908043001)

Project: Strata Energy - Ross Project
Lab ID: S0908043-002
Client Sample ID: HB Well 03
COC: 125598

Work Order: S0908043
Collection Date: 8/3/2009 1:00:00 PM
Date Received: 8/4/2009 12:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.62			s.u.	08/03/2009 1300	Field
Conductivity	1542			µmhos/cm	08/03/2009 1300	Field
water Level	n/a				08/03/2009 1300	Field
Temperature	10.1			°C	08/03/2009 1300	Field
General Parameters						
pH	8.2	0.1		s.u.	08/05/2009 000 CK	SM 4500 H B
Electrical Conductivity	1720	5		µmhos/cm	08/05/2009 000 CK	SM 2510B
Total Dissolved Solids (180)	1230	10		mg/L	08/05/2009 1455 MJH	SM 2540
Solids, Total Dissolved (Calc)	1110	10		mg/L	08/20/2009 1523 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	485	5		mg/L	08/05/2009 1824 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/18/2009 1313 SK	EPA 350.1
Gross Alpha	8.8 ± 2.5	2		pCi/L	08/16/2009 827 SH	SM 7110B
Gross Beta	9.3 ± 3.7	4		pCi/L	08/16/2009 827 SH	SM 7110B
Radium 226	0.87 ± 0.29	0.2		pCi/L	08/12/2009 1506 SH	SM 7500-Ra B
Total Radium 228	1.20 ± 0.38	1		pCi/L	08/14/2009 118 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	591	5		mg/L	08/05/2009 1824 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/05/2009 1824 CK	SM 2320B
Chloride	15	1		mg/L	08/11/2009 306 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/05/2009 1824 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/13/2009 1306 SK	EPA 353.2
Sulfate	411	1		mg/L	08/11/2009 306 KO	EPA 300.0
Cations						
Calcium	83	1		mg/L	08/18/2009 2002 DG	EPA 200.7
Magnesium	52	1		mg/L	08/18/2009 2002 DG	EPA 200.7
Potassium	16	1		mg/L	08/18/2009 2002 DG	EPA 200.7
Sodium	248	1		mg/L	08/18/2009 2002 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants

1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009

Report ID: S0908043002
(Replaces S0908043001)

Project: Strata Energy - Ross Project

Lab ID: S0908043-002

Client Sample ID: HB Well 03

COC: 125598

Work Order: S0908043

Collection Date: 8/3/2009 1:00:00 PM

Date Received: 8/4/2009 12:15:00 PM

Sampler: RF

Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.69	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Chloride	0.41	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Fluoride	0.01	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Sulfate	8.55	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Calcium	4.16	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Magnesium	4.26	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Potassium	0.39	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Sodium	10.76	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	19.59	0		meq/L	08/20/2009 1523 WN	SM 1030E
Anion Sum	18.67	0		meq/L	08/20/2009 1523 WN	SM 1030E
Cation-Anion Balance	2.39	0		%	08/20/2009 1523 WN	SM 1030E
Cation-Anion Difference	0.91	0		meq/L	08/20/2009 1523 WN	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/05/2009 2141 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/05/2009 1542 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/05/2009 1542 MS	EPA 200.8
Boron	0.2	0.1		mg/L	08/05/2009 2141 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/05/2009 1542 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/05/2009 2141 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/05/2009 1542 MS	EPA 200.8
Iron	0.55	0.05		mg/L	08/05/2009 2141 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/05/2009 1542 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/07/2009 1224 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/05/2009 1542 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/05/2009 2141 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/05/2009 1542 MS	EPA 200.8
Uranium	0.006	0.001		mg/L	08/05/2009 1542 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/05/2009 1542 MS	EPA 200.8
Zinc	0.25	0.01		mg/L	08/05/2009 2141 DG	EPA 200.7
Total Metals - 200.2						
Iron	2.33	0.05		mg/L	08/07/2009 1800 DG	EPA 200.7
Manganese	0.15	0.02		mg/L	08/07/2009 1800 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/9/2009
Report ID: S0909025001

Project: Ross Project
Lab ID: S0909025-001
Client Sample ID: HB Well 04 Resample 9
COC: 131102

Work Order: S0909025
Collection Date: 9/1/2009 1:00:00 PM
Date Received: 9/2/2009 8:42:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.36			s.u.	09/01/2009 1300	Field
Conductivity	1295			µmhos/cm	09/01/2009 1300	Field
Turbidity	2.18			NTU	09/01/2009 1300	Field
Temperature	10.3			°C	09/01/2009 1300	Field
General Parameters						
pH	7.8	0.1		s.u.	09/02/2009 1234 CK	SM 4500 H B
Electrical Conductivity	1730	5		µmhos/cm	09/02/2009 1234 CK	SM 2510B
Total Dissolved Solids (180)	1460	10		mg/L	09/02/2009 1425 SNS	SM 2540
Gross Alpha	16.1 ± 3.4	2		pCi/L	09/09/2009 1056 SH	SM 7110B
Gross Beta	11.2 ± 3.9	3		pCi/L	09/09/2009 1056 SH	SM 7110B
Radium 226	0.45 ± 0.27	0.2		pCi/L	09/08/2009 1204 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/08/2009 2033 SH	Ra-05
Dissolved Metals						
Uranium	0.039	0.001		mg/L	09/02/2009 1209 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/02/2009 1209 MS	EPA 200.8

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009
Report ID: S0908043002
(Replaces S0908043001)

Project: Strata Energy - Ross Project
Lab ID: S0908043-003
Client Sample ID: HB Well 04
COC: 125598

Work Order: S0908043
Collection Date: 8/3/2009 2:00:00 PM
Date Received: 8/4/2009 12:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.44			s.u.	08/03/2009 1400	Field
Conductivity	1477			µmhos/cm	08/03/2009 1400	Field
Water Level	n/a				08/03/2009 1400	Field
Temperature	10.2			°C	08/03/2009 1400	Field
General Parameters						
pH	8.0	0.1		s.u.	08/05/2009 000 CK	SM 4500 H B
Electrical Conductivity	1740	5		µmhos/cm	08/05/2009 000 CK	SM 2510B
Total Dissolved Solids (180)	1420	10		mg/L	08/05/2009 1500 MJH	SM 2540
Solids, Total Dissolved (Calc)	1230	10		mg/L	08/20/2009 1523 WN	SM 1030E
Alkalinity, Total (As CaCO ₃)	351	5		mg/L	08/05/2009 1839 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/18/2009 1314 SK	EPA 350.1
Gross Alpha	20.7 ± 3.5	2		pCi/L	08/16/2009 827 SH	SM 7110B
Gross Beta	7.9 ± 3.7	4		pCi/L	08/16/2009 827 SH	SM 7110B
Radium 226	0.28 ± 0.22	0.2		pCi/L	08/12/2009 1827 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/14/2009 118 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	429	5		mg/L	08/05/2009 1839 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/05/2009 1839 CK	SM 2320B
Chloride	17	1		mg/L	08/11/2009 320 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/05/2009 1839 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.1	0.1		mg/L	08/13/2009 1307 SK	EPA 353.2
Sulfate	597	1		mg/L	08/11/2009 320 KO	EPA 300.0
Cations						
Calcium	202	1		mg/L	08/05/2009 2151 DG	EPA 200.7
Magnesium	60	1		mg/L	08/05/2009 2151 DG	EPA 200.7
Potassium	7	1		mg/L	08/05/2009 2151 DG	EPA 200.7
Sodium	133	1		mg/L	08/05/2009 2151 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009
Report ID: S0908043002
(Replaces S0908043001)

Project: Strata Energy - Ross Project
Lab ID: S0908043-003
Client Sample ID: HB Well 04
COC: 125598

Work Order: S0908043
Collection Date: 8/3/2009 2:00:00 PM
Date Received: 8/4/2009 12:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.02	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Chloride	0.47	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Fluoride	ND	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Nitrate + Nitrite as N	0.08	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Sulfate	12.42	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Calcium	10.08	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Magnesium	4.96	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Potassium	0.18	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Sodium	5.78	0.01		meq/L	08/20/2009 1523 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	21.02	0		meq/L	08/20/2009 1523 WN	SM 1030E
Anion Sum	20.01	0		meq/L	08/20/2009 1523 WN	SM 1030E
Cation-Anion Balance	2.46	0		%	08/20/2009 1523 WN	SM 1030E
Cation-Anion Difference	1.01	0		meq/L	08/20/2009 1523 WN	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/05/2009 2151 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/05/2009 1545 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/05/2009 1545 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/05/2009 2151 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/05/2009 1545 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/05/2009 2151 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/05/2009 1545 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/05/2009 2151 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/05/2009 1545 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/07/2009 1226 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/05/2009 1545 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/05/2009 2151 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/05/2009 1545 MS	EPA 200.8
Uranium	0.034	0.001		mg/L	08/05/2009 1545 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/05/2009 1545 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	08/05/2009 2151 DG	EPA 200.7
Total Metals - 200.2						
Iron	0.95	0.05		mg/L	08/07/2009 1810 DG	EPA 200.7
Manganese	0.08	0.02		mg/L	08/07/2009 1810 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009
Report ID: S0908047002
(Replaces S0908047001)

Project: Ross Project
Lab ID: S0908047-001
Client Sample ID: HB Well 05
COC: 125599

Work Order: S0908047
Collection Date: 8/4/2009 11:00:00 AM
Date Received: 8/5/2009 8:17:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.64			s.u.	08/04/2009 1100	Field
Conductivity	1343			µmhos/cm	08/04/2009 1100	Field
water level	n/a				08/04/2009 1100	Field
Temperature	12.6			°C	08/04/2009 1100	Field
General Parameters						
pH	8.1	0.1		s.u.	08/06/2009 000 CK	SM 4500 H B
Electrical Conductivity	1570	5		µmhos/cm	08/06/2009 000 CK	SM 2510B
Total Dissolved Solids (180)	1100	10		mg/L	08/05/2009 1515 MJH	SM 2540
Solids, Total Dissolved (Calc)	1020	10		mg/L	08/20/2009 1555 WN	SM 1030E
Volatile Solids	ND	5		mg/L	08/05/2009 1515 MJH	SM 2540
Alkalinity, Total (As CaCO ₃)	499	5		mg/L	08/06/2009 1548 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2009 000 SK	EPA 350.1
Gross Alpha	7.1 ± 2.6	2		pCi/L	08/16/2009 827 SH	SM 7110B
Gross Beta	7.2 ± 3.7	4		pCi/L	08/16/2009 827 SH	SM 7110B
Radium 226	0.20 ± 0.23	0.2		pCi/L	08/12/2009 1827 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/14/2009 118 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	609	5		mg/L	08/06/2009 1548 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/06/2009 1548 CK	SM 2320B
Chloride	6	1		mg/L	08/11/2009 716 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	08/06/2009 1548 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	08/13/2009 1321 SK	EPA 353.2
Sulfate	327	1		mg/L	08/11/2009 716 KO	EPA 300.0
Cations						
Calcium	87	1		mg/L	08/05/2009 2210 DG	EPA 200.7
Magnesium	36	1		mg/L	08/05/2009 2210 DG	EPA 200.7
Potassium	8	1		mg/L	08/05/2009 2210 DG	EPA 200.7
Sodium	258	1		mg/L	08/05/2009 2210 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/26/2009
Report ID: S0908047002
(Replaces S0908047001)

Project: Ross Project
Lab ID: S0908047-001
Client Sample ID: HB Well 05
COC: 125599

Work Order: S0908047
Collection Date: 8/4/2009 11:00:00 AM
Date Received: 8/5/2009 8:17:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.98	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Chloride	0.15	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Fluoride	0.01	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Nitrate + Nitrite as N	0.03	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Sulfate	6.81	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Calcium	4.32	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Magnesium	2.98	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Potassium	0.20	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Sodium	11.22	0.01		meq/L	08/20/2009 1555 WN	SM 1030E
Cation / Anion Balance						
Cation Sum	18.73	0		meq/L	08/20/2009 1555 WN	SM 1030E
Anion Sum	17.00	0		meq/L	08/20/2009 1555 WN	SM 1030E
Cation-Anion Balance	4.86	0		%	08/20/2009 1555 WN	SM 1030E
Cation-Anion Difference	1.73	0		meq/L	08/20/2009 1555 WN	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/05/2009 2210 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/05/2009 1552 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/05/2009 1552 MS	EPA 200.8
Boron	0.2	0.1		mg/L	08/05/2009 2210 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/05/2009 1552 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/05/2009 2210 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/05/2009 1552 MS	EPA 200.8
Iron	0.49	0.05		mg/L	08/05/2009 2210 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/05/2009 1552 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/07/2009 1233 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/05/2009 1552 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/05/2009 2210 DG	EPA 200.7
Selenium	0.007	0.005		mg/L	08/05/2009 1552 MS	EPA 200.8
Uranium	0.015	0.001		mg/L	08/05/2009 1552 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/05/2009 1552 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/05/2009 2210 DG	EPA 200.7
Total Metals - 200.2						
Iron	32.8	0.05		mg/L	08/07/2009 1815 DG	EPA 200.7
Manganese	0.08	0.02		mg/L	08/07/2009 1815 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009
Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-004
Client Sample ID: P17177W
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 5:45:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.40			s.u.	08/27/2009 1745	Field
Conductivity	794			µmhos/cm	08/27/2009 1745	Field
Turbidity	0.37			NTU	08/27/2009 1745	Field
Temperature	10.1			°C	08/27/2009 1745	Field
General Parameters						
pH	7.8	0.1		s.u.	08/31/2009 1412 CK	SM 4500 H B
Electrical Conductivity	923	5		µmhos/cm	08/31/2009 1412 CK	SM 2510B
Total Dissolved Solids (180)	610	10		mg/L	08/31/2009 1215 AMB	SM 2540
Solids, Total Dissolved (Calc)	480	10		mg/L	09/09/2009 1002 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	339	5		mg/L	08/31/2009 1412 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1115 SK	EPA 350.1
Gross Alpha	19.5 ± 3.3	2		pCi/L	09/09/2009 000 SH	SM 7110B
Gross Beta	6.4 ± 2.4	3		pCi/L	09/09/2009 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	09/08/2009 1508 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/08/2009 2237 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	414	5		mg/L	08/31/2009 1412 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/31/2009 1412 CK	SM 2320B
Chloride	21	1		mg/L	08/31/2009 2208 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/31/2009 1412 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	21.9	0.1		mg/L	08/31/2009 1559 SK	EPA 353.2
Sulfate	46	1		mg/L	08/31/2009 2208 KO	EPA 300.0
Cations						
Calcium	115	1		mg/L	09/08/2009 2059 DG	EPA 200.7
Magnesium	30	1		mg/L	09/08/2009 2059 DG	EPA 200.7
Potassium	5	1		mg/L	09/08/2009 2059 DG	EPA 200.7
Sodium	39	1		mg/L	09/08/2009 2059 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009
Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-004
Client Sample ID: P17177W
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 5:45:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.78	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Chloride	0.57	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Nitrate + Nitrite as N	1.56	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sulfate	0.96	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Calcium	5.72	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Magnesium	2.47	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Potassium	0.13	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sodium	1.67	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.01	0		meq/L	09/09/2009 1002 KO	SM 1030E
Anion Sum	9.89	0		meq/L	09/09/2009 1002 KO	SM 1030E
Cation-Anion Balance	0.59	0		%	09/09/2009 1002 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/01/2009 1940 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/31/2009 1202 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/31/2009 1202 MS	EPA 200.8
Boron	ND	0.1		mg/L	09/01/2009 1940 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/31/2009 1202 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/01/2009 1940 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/31/2009 1202 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/01/2009 1940 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/31/2009 1202 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/01/2009 1014 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/31/2009 1202 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/01/2009 1940 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/31/2009 1202 MS	EPA 200.8
Uranium	0.024	0.001		mg/L	08/31/2009 1202 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/31/2009 1202 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/01/2009 1940 DG	EPA 200.7
Total Metals - 200.2						
Iron	0.11	0.05		mg/L	09/01/2009 2217 DG	EPA 200.7
Manganese	ND	0.02		mg/L	09/01/2009 2217 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager
December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/6/2009
Report ID: S0909132001

Project: Ross Project
Lab ID: S0909132-001
Client Sample ID: P31770W
COC: 131104

Work Order: S0909132
Collection Date: 9/3/2009 2:30:00 PM
Date Received: 9/4/2009 2:12:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.85			s.u.	09/03/2009 1430	Field
Conductivity	1910			µmhos/cm	09/03/2009 1430	Field
Turbidity	0.02			NTU	09/03/2009 1430	Field
Temperature	12.0			°C	09/03/2009 1430	Field
General Parameters						
pH	8.2	0.1		s.u.	09/09/2009 1455 CK	SM 4500 H B
Electrical Conductivity	2510	5		µmhos/cm	09/09/2009 1455 CK	SM 2510B
Total Dissolved Solids (180)	1800	10		mg/L	09/09/2009 1700 AMB	SM 2540
Solids, Total Dissolved (Calc)	1850	10		mg/L	09/17/2009 1145 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	501	5		mg/L	09/09/2009 1455 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/10/2009 1136 SK	EPA 350.1
Gross Alpha	7.8 ± 3.2	2		pCi/L	10/01/2009 654 SH	SM 7110B
Gross Beta	12.9 ± 3.7	3.9		pCi/L	10/01/2009 654 SH	SM 7110B
Radium 226	0.32 ± 0.23	0.2		pCi/L	09/29/2009 1857 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	10/06/2009 116 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	612	5		mg/L	09/09/2009 1455 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	09/09/2009 1455 CK	SM 2320B
Chloride	21	1		mg/L	09/16/2009 802 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	09/09/2009 1455 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.6	0.1		mg/L	09/10/2009 1705 SK	EPA 353.2
Sulfate	842	1		mg/L	09/16/2009 802 KO	EPA 300.0
Cations						
Calcium	57	1		mg/L	09/14/2009 2314 DG	EPA 200.7
Magnesium	25	1		mg/L	09/14/2009 2314 DG	EPA 200.7
Potassium	14	1		mg/L	09/14/2009 2314 DG	EPA 200.7
Sodium	593	1		mg/L	09/09/2009 345 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/6/2009
Report ID: S0909132001

Project: Ross Project
Lab ID: S0909132-001
Client Sample ID: P31770W
COC: 131104

Work Order: S0909132
Collection Date: 9/3/2009 2:30:00 PM
Date Received: 9/4/2009 2:12:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.02	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Chloride	0.59	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Nitrate + Nitrite as N	0.04	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Sulfate	17.52	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Calcium	2.82	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Magnesium	2.01	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Potassium	0.35	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Sodium	25.80	0.01		meq/L	09/17/2009 1145 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	30.99	0		meq/L	09/17/2009 1145 KO	SM 1030E
Anion Sum	28.20	0		meq/L	09/17/2009 1145 KO	SM 1030E
Cation-Anion Balance	4.72	0		%	09/17/2009 1145 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/09/2009 345 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	09/04/2009 1753 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/04/2009 1753 MS	EPA 200.8
Boron	0.3	0.1		mg/L	09/09/2009 345 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/04/2009 1753 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/09/2009 345 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/04/2009 1753 MS	EPA 200.8
Iron	0.90	0.05		mg/L	09/09/2009 345 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/04/2009 1753 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/10/2009 1141 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/04/2009 1753 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/09/2009 345 DG	EPA 200.7
Selenium	0.006	0.005		mg/L	09/04/2009 1753 MS	EPA 200.8
Uranium	0.017	0.001		mg/L	09/04/2009 1753 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/04/2009 1753 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	09/09/2009 345 DG	EPA 200.7
Total Metals						
Iron	0.91	0.05		mg/L	09/10/2009 042 DG	EPA 200.7
Manganese	0.15	0.02		mg/L	09/10/2009 042 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909038001

Project: Ross Project
Lab ID: S0909038-001
Client Sample ID: P42868W
COC: 125605

Work Order: S0909038
Collection Date: 8/31/2009 9:30:00 AM
Date Received: 9/2/2009 8:40:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.71			s.u.	08/31/2009 930	Field
Conductivity	1167			µmhos/cm	08/31/2009 930	Field
Turbidity	1.71			NTU	08/31/2009 930	Field
Temperature	10.8			°C	08/31/2009 930	Field
General Parameters						
pH	8.7	0.1		s.u.	09/03/2009 1319 CK	SM 4500 H B
Electrical Conductivity	1250	5		µmhos/cm	09/03/2009 1319 CK	SM 2510B
Total Dissolved Solids (180)	810	10		mg/L	09/02/2009 1545 SNS	SM 2540
Solids, Total Dissolved (Calc)	770	10		mg/L	09/09/2009 1146 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	547	5		mg/L	09/03/2009 1319 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1207 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	09/17/2009 1022 SH	SM 7110B
Gross Beta	ND	3		pCi/L	09/17/2009 1022 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	09/17/2009 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/23/2009 2145 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	616	5		mg/L	09/03/2009 1319 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	25	5		mg/L	09/03/2009 1319 CK	SM 2320B
Chloride	1	1		mg/L	09/02/2009 1801 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	09/03/2009 1319 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	09/10/2009 1429 SK	EPA 353.2
Sulfate	117	1		mg/L	09/02/2009 1801 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	09/02/2009 2256 DG	EPA 200.7
Magnesium	1	1		mg/L	09/02/2009 2256 DG	EPA 200.7
Potassium	3	1		mg/L	09/02/2009 2256 DG	EPA 200.7
Sodium	321	1		mg/L	09/02/2009 2256 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909038001

Project: Ross Project
Lab ID: S0909038-001
Client Sample ID: P42868W
COC: 125605

Work Order: S0909038
Collection Date: 8/31/2009 9:30:00 AM
Date Received: 9/2/2009 8:40:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.10	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Carbonate as CO ₃	0.84	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Chloride	0.03	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Sulfate	2.43	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Calcium	0.11	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Magnesium	0.09	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Potassium	0.07	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Sodium	13.95	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	14.24	0		meq/L	09/09/2009 1146 KO	SM 1030E
Anion Sum	13.43	0		meq/L	09/09/2009 1146 KO	SM 1030E
Cation-Anion Balance	2.91	0		%	09/09/2009 1146 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/02/2009 2256 DG	EPA 200.7
Arsenic	0.020	0.005		mg/L	09/03/2009 1122 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/03/2009 1122 MS	EPA 200.8
Boron	0.2	0.1		mg/L	09/02/2009 2256 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/03/2009 1122 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/02/2009 2256 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/03/2009 1122 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/02/2009 2256 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/03/2009 1122 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/04/2009 928 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/03/2009 1122 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/02/2009 2256 DG	EPA 200.7
Selenium	ND	0.005		mg/L	09/03/2009 1122 MS	EPA 200.8
Uranium	ND	0.001		mg/L	09/03/2009 1122 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/03/2009 1122 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/02/2009 2256 DG	EPA 200.7
Total Metals -						
Iron	ND	0.05		mg/L	09/15/2009 332 DG	EPA 200.7
Manganese	ND	0.02		mg/L	09/15/2009 332 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/23/2009
Report ID: S0908499001

Project: Ross Project
Lab ID: S0908499-001
Client Sample ID: P50113W
COC: 125604

Work Order: S0908499
Collection Date: 8/28/2009 11:30:00 AM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.45			s.u.	08/28/2009 1130	Field
Conductivity	1440			µmhos/cm	08/28/2009 1130	Field
Turbidity	0.98			NTU	08/28/2009 1130	Field
Temperature	9.5			°C	08/28/2009 1130	Field
General Parameters						
pH	8.0	0.1		s.u.	08/31/2009 1538 CK	SM 4500 H B
Electrical Conductivity	1840	5		µmhos/cm	08/31/2009 1538 CK	SM 2510B
Total Dissolved Solids (180)	1320	10		mg/L	08/31/2009 1220 AMB	SM 2540
Solids, Total Dissolved (Calc)	1060	10		mg/L	09/04/2009 1431 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	511	5		mg/L	08/31/2009 1538 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1116 SK	EPA 350.1
Gross Alpha	87.3 ± 6.7	2		pCi/L	09/17/2009 1022 SH	SM 7110B
Gross Beta	40.7 ± 4.4	4		pCi/L	09/17/2009 1022 SH	SM 7110B
Radium 226	0.60 ± 0.24	0.2		pCi/L	09/17/2009 1349 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/22/2009 2027 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	624	5		mg/L	08/31/2009 1538 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/31/2009 1538 CK	SM 2320B
Chloride	63	1		mg/L	09/01/2009 658 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/31/2009 1538 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	44.9	0.1		mg/L	08/31/2009 1600 SK	EPA 353.2
Sulfate	249	1		mg/L	09/01/2009 658 KO	EPA 300.0
Cations						
Calcium	120	1		mg/L	09/01/2009 1947 DG	EPA 200.7
Magnesium	67	1		mg/L	09/01/2009 1947 DG	EPA 200.7
Potassium	7	1		mg/L	09/01/2009 1947 DG	EPA 200.7
Sodium	208	1		mg/L	09/01/2009 1947 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/23/2009
Report ID: S0908499001

Project: Ross Project
Lab ID: S0908499-001
Client Sample ID: P50113W
COC: 125604

Work Order: S0908499
Collection Date: 8/28/2009 11:30:00 AM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.22	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Chloride	1.76	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Nitrate + Nitrite as N	3.20	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Sulfate	5.18	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Calcium	5.97	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Magnesium	5.51	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Potassium	0.16	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Sodium	9.04	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.70	0		meq/L	09/04/2009 1431 KO	SM 1030E
Anion Sum	20.39	0		meq/L	09/04/2009 1431 KO	SM 1030E
Cation-Anion Balance	0.76	0		%	09/04/2009 1431 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/01/2009 1947 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/31/2009 1212 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/31/2009 1212 MS	EPA 200.8
Boron	ND	0.1		mg/L	09/01/2009 1947 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/31/2009 1212 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/01/2009 1947 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/31/2009 1212 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/01/2009 1947 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/31/2009 1212 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/01/2009 1016 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/31/2009 1212 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/01/2009 1947 DG	EPA 200.7
Selenium	0.042	0.005		mg/L	08/31/2009 1212 MS	EPA 200.8
Uranium	0.212	0.001		mg/L	08/31/2009 1212 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/31/2009 1212 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/01/2009 1947 DG	EPA 200.7
Total Metals - 200.2						
Iron	ND	0.05		mg/L	09/01/2009 2220 DG	EPA 200.7
Manganese	0.07	0.02		mg/L	09/01/2009 2220 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909038001

Project: Ross Project
Lab ID: S0909038-002
Client Sample ID: P61006W
COC: 125605

Work Order: S0909038
Collection Date: 8/31/2009 10:45:00 AM
Date Received: 9/2/2009 8:40:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.83			s.u.	08/31/2009 1045	Field
Conductivity	918			µmhos/cm	08/31/2009 1045	Field
Turbidity	1.2			NTU	08/31/2009 1045	Field
Temperature	12.9			°C	08/31/2009 1045	Field
General Parameters						
pH	8.3	0.1		s.u.	09/03/2009 1343 CK	SM 4500 H B
Electrical Conductivity	1030	5		µmhos/cm	09/03/2009 1343 CK	SM 2510B
Total Dissolved Solids (180)	660	10		mg/L	09/02/2009 1550 SNS	SM 2540
Solids, Total Dissolved (Calc)	650	10		mg/L	09/09/2009 1146 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	490	5		mg/L	09/03/2009 1343 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1208 SK	EPA 350.1
Gross Alpha	4.8 ± 1.4	2		pCi/L	09/17/2009 1022 SH	SM 7110B
Gross Beta	3.6 ± 1.9	3		pCi/L	09/17/2009 1022 SH	SM 7110B
Radium 226	1.13 ± 0.32	0.2		pCi/L	09/17/2009 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/23/2009 2145 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	578	5		mg/L	09/03/2009 1343 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	9	5		mg/L	09/03/2009 1343 CK	SM 2320B
Chloride	ND	1		mg/L	09/02/2009 1810 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	09/03/2009 1343 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	09/10/2009 1430 SK	EPA 353.2
Sulfate	74	1		mg/L	09/02/2009 1810 KO	EPA 300.0
Cations						
Calcium	18	1		mg/L	09/02/2009 2258 DG	EPA 200.7
Magnesium	9	1		mg/L	09/02/2009 2258 DG	EPA 200.7
Potassium	8	1		mg/L	09/02/2009 2258 DG	EPA 200.7
Sodium	244	1		mg/L	09/02/2009 2258 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909038001

Project: Ross Project
Lab ID: S0909038-002
Client Sample ID: P61006W
COC: 125605

Work Order: S0909038
Collection Date: 8/31/2009 10:45:00 AM
Date Received: 9/2/2009 8:40:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.48	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Carbonate as CO ₃	0.30	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Chloride	ND	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Sulfate	1.54	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Calcium	0.90	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Magnesium	0.72	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Potassium	0.19	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Sodium	10.61	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.44	0		meq/L	09/09/2009 1146 KO	SM 1030E
Anion Sum	11.34	0		meq/L	09/09/2009 1146 KO	SM 1030E
Cation-Anion Balance	4.62	0		%	09/09/2009 1146 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/02/2009 2258 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	09/03/2009 1125 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/03/2009 1125 MS	EPA 200.8
Boron	0.1	0.1		mg/L	09/02/2009 2258 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/03/2009 1125 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/02/2009 2258 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/03/2009 1125 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/02/2009 2258 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/03/2009 1125 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/04/2009 934 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/03/2009 1125 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/02/2009 2258 DG	EPA 200.7
Selenium	ND	0.005		mg/L	09/03/2009 1125 MS	EPA 200.8
Uranium	0.002	0.001		mg/L	09/03/2009 1125 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/03/2009 1125 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/02/2009 2258 DG	EPA 200.7
Total Metals -						
Iron	0.16	0.05		mg/L	09/15/2009 334 DG	EPA 200.7
Manganese	ND	0.02		mg/L	09/15/2009 334 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909038001

Project: Ross Project
Lab ID: S0909038-003
Client Sample ID: P61007W
COC: 125605

Work Order: S0909038
Collection Date: 8/31/2009 11:15:00 AM
Date Received: 9/2/2009 8:40:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.63			s.u.	08/31/2009 1115	Field
Conductivity	1065			µmhos/cm	08/31/2009 1115	Field
Turbidity	1.43			NTU	08/31/2009 1115	Field
Temperature	12.5			°C	08/31/2009 1115	Field
General Parameters						
pH	8.8	0.1		s.u.	09/03/2009 2215 CK	SM 4500 H B
Electrical Conductivity	1170	5		µmhos/cm	09/03/2009 2215 CK	SM 2510B
Total Dissolved Solids (180)	720	10		mg/L	09/02/2009 1555 SNS	SM 2540
Solids, Total Dissolved (Calc)	710	10		mg/L	09/09/2009 1146 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	537	5		mg/L	09/03/2009 2215 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1215 SK	EPA 350.1
Gross Alpha	2.3 ± 1.4	2		pCi/L	09/17/2009 1022 SH	SM 7110B
Gross Beta	ND	3		pCi/L	09/17/2009 1022 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	09/17/2009 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/23/2009 2145 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	591	5		mg/L	09/03/2009 2215 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	32	5		mg/L	09/03/2009 2215 CK	SM 2320B
Chloride	ND	1		mg/L	09/02/2009 1837 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	09/03/2009 2215 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	09/10/2009 1431 SK	EPA 353.2
Sulfate	83	1		mg/L	09/02/2009 1837 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	09/02/2009 2301 DG	EPA 200.7
Magnesium	1	1		mg/L	09/02/2009 2301 DG	EPA 200.7
Potassium	3	1		mg/L	09/02/2009 2301 DG	EPA 200.7
Sodium	293	1		mg/L	09/02/2009 2301 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909038001

Project: Ross Project
Lab ID: S0909038-003
Client Sample ID: P61007W
COC: 125605

Work Order: S0909038
Collection Date: 8/31/2009 11:15:00 AM
Date Received: 9/2/2009 8:40:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.68	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Carbonate as CO ₃	1.06	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Chloride	ND	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Sulfate	1.72	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Calcium	0.15	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Magnesium	0.12	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Potassium	0.06	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Sodium	12.74	0.01		meq/L	09/09/2009 1146 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	13.08	0		meq/L	09/09/2009 1146 KO	SM 1030E
Anion Sum	12.47	0		meq/L	09/09/2009 1146 KO	SM 1030E
Cation-Anion Balance	2.40	0		%	09/09/2009 1146 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/02/2009 2301 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	09/03/2009 1129 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/03/2009 1129 MS	EPA 200.8
Boron	0.2	0.1		mg/L	09/02/2009 2301 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/03/2009 1129 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/02/2009 2301 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/03/2009 1129 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/02/2009 2301 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/03/2009 1129 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/04/2009 935 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/03/2009 1129 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/02/2009 2301 DG	EPA 200.7
Selenium	ND	0.005		mg/L	09/03/2009 1129 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	09/03/2009 1129 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/03/2009 1129 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/02/2009 2301 DG	EPA 200.7
Total Metals -						
Iron	0.17	0.05		mg/L	09/15/2009 337 DG	EPA 200.7
Manganese	ND	0.02		mg/L	09/15/2009 337 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009
Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-003
Client Sample ID: P71108W
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 4:15:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.53			s.u.	08/27/2009 1615	Field
Conductivity	1731			µmhos/cm	08/27/2009 1615	Field
Turbidity	1.86			NTU	08/27/2009 1615	Field
Temperature	13.0			°C	08/27/2009 1615	Field
General Parameters						
pH	8.0	0.1		s.u.	08/31/2009 1402 CK	SM 4500 H B
Electrical Conductivity	2190	5		µmhos/cm	08/31/2009 1402 CK	SM 2510B
Total Dissolved Solids (180)	1610	10		mg/L	08/31/2009 1205 AMB	SM 2540
Solids, Total Dissolved (Calc)	1600	10		mg/L	09/09/2009 1002 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	580	5		mg/L	08/31/2009 1402 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1114 SK	EPA 350.1
Gross Alpha	57.7 ± 5.6	2		pCi/L	09/09/2009 1056 SH	SM 7110B
Gross Beta	18.6 ± 3.9	3		pCi/L	09/09/2009 1056 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	09/08/2009 1508 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/08/2009 2237 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	707	5		mg/L	08/31/2009 1402 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/31/2009 1402 CK	SM 2320B
Chloride	7	1		mg/L	08/31/2009 2159 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/31/2009 1402 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.6	0.1		mg/L	08/31/2009 1441 SK	EPA 353.2
Sulfate	679	1		mg/L	08/31/2009 2159 KO	EPA 300.0
Cations						
Calcium	76	1		mg/L	09/08/2009 2057 DG	EPA 200.7
Magnesium	98	1		mg/L	09/08/2009 2057 DG	EPA 200.7
Potassium	9	1		mg/L	09/08/2009 2057 DG	EPA 200.7
Sodium	381	1		mg/L	09/08/2009 2057 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009
Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-003
Client Sample ID: P71108W
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 4:15:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.59	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Chloride	0.19	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Nitrate + Nitrite as N	0.04	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sulfate	14.14	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Calcium	3.78	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Magnesium	8.03	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Potassium	0.23	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sodium	16.58	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	28.63	0		meq/L	09/09/2009 1002 KO	SM 1030E
Anion Sum	25.99	0		meq/L	09/09/2009 1002 KO	SM 1030E
Cation-Anion Balance	4.83	0		%	09/09/2009 1002 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/01/2009 1937 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/31/2009 1158 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/31/2009 1158 MS	EPA 200.8
Boron	0.1	0.1		mg/L	09/01/2009 1937 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/31/2009 1158 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/01/2009 1937 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/31/2009 1158 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/01/2009 1937 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/31/2009 1158 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/01/2009 1012 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/31/2009 1158 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/01/2009 1937 DG	EPA 200.7
Selenium	0.026	0.005		mg/L	08/31/2009 1158 MS	EPA 200.8
Uranium	0.113	0.001		mg/L	08/31/2009 1158 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/31/2009 1158 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	09/01/2009 1937 DG	EPA 200.7
Total Metals - 200.2						
Iron	0.07	0.05		mg/L	09/01/2009 2215 DG	EPA 200.7
Manganese	0.25	0.02		mg/L	09/01/2009 2215 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909039001

Project: Ross Project
Lab ID: S0909039-001
Client Sample ID: P78287W
COC: 125608

Work Order: S0909039
Collection Date: 9/1/2009 12:10:00 PM
Date Received: 9/2/2009 8:43:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.72			s.u.	09/01/2009 1210	Field
Conductivity	737			µmhos/cm	09/01/2009 1210	Field
Turbidity	0.74			NTU	09/01/2009 1210	Field
Temperature	16.1			°C	09/01/2009 1210	Field
General Parameters						
pH	8.0	0.1		s.u.	09/03/2009 1624 CK	SM 4500 H B
Electrical Conductivity	841	5		µmhos/cm	09/03/2009 1624 CK	SM 2510B
Total Dissolved Solids (180)	580	10		mg/L	09/02/2009 1600 SNS	SM 2540
Solids, Total Dissolved (Calc)	520	10		mg/L	09/17/2009 1535 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	116	5		mg/L	09/03/2009 1624 CK	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	09/09/2009 1216 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	09/17/2009 1022 SH	SM 7110B
Gross Beta	4.1 ± 1.7	3		pCi/L	09/17/2009 1022 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	09/17/2009 000 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/24/2009 208 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	142	5		mg/L	09/03/2009 1624 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	09/03/2009 1624 CK	SM 2320B
Chloride	6	1		mg/L	09/17/2009 000 KO	EPA 300.0
Fluoride	1.1	0.1		mg/L	09/03/2009 1624 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	09/10/2009 1432 SK	EPA 353.2
Sulfate	260	1		mg/L	09/17/2009 000 KO	EPA 300.0
Cations						
Calcium	22	1		mg/L	09/16/2009 820 DG	EPA 200.7
Magnesium	5	1		mg/L	09/16/2009 820 DG	EPA 200.7
Potassium	6	1		mg/L	09/16/2009 820 DG	EPA 200.7
Sodium	148	1		mg/L	09/02/2009 2303 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: *Connie Mattson*
Connie Mattson, Project Manager
December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/28/2009
Report ID: S0909039001

Project: Ross Project
Lab ID: S0909039-001
Client Sample ID: P78287W
COC: 125608

Work Order: S0909039
Collection Date: 9/1/2009 12:10:00 PM
Date Received: 9/2/2009 8:43:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	2.32	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Chloride	0.17	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Fluoride	0.05	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Sulfate	5.41	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Calcium	1.09	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Magnesium	0.39	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Potassium	0.16	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Sodium	6.45	0.01		meq/L	09/17/2009 1535 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	8.11	0		meq/L	09/17/2009 1535 KO	SM 1030E
Anion Sum	7.97	0		meq/L	09/17/2009 1535 KO	SM 1030E
Cation-Anion Balance	0.82	0		%	09/17/2009 1535 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/02/2009 2303 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	09/03/2009 1139 MS	EPA 200.8
Barium	ND	0.5		mg/L	09/03/2009 1139 MS	EPA 200.8
Boron	0.5	0.1		mg/L	09/02/2009 2303 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	09/03/2009 1139 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/02/2009 2303 DG	EPA 200.7
Copper	ND	0.01		mg/L	09/03/2009 1139 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/02/2009 2303 DG	EPA 200.7
Lead	ND	0.02		mg/L	09/03/2009 1139 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/04/2009 938 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	09/03/2009 1139 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/02/2009 2303 DG	EPA 200.7
Selenium	ND	0.005		mg/L	09/03/2009 1139 MS	EPA 200.8
Uranium	ND	0.001		mg/L	09/03/2009 1139 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	09/03/2009 1139 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/02/2009 2303 DG	EPA 200.7
Total Metals -						
Iron	0.14	0.05		mg/L	09/04/2009 503 DG	EPA 200.7
Manganese	0.12	0.02		mg/L	09/04/2009 503 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/23/2009
Report ID: S0908499001

Project: Ross Project
Lab ID: S0908499-002
Client Sample ID: P84665W
COC: 125604

Work Order: S0908499
Collection Date: 8/28/2009 12:00:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.53			s.u.	08/28/2009 1200	Field
Conductivity	804			µmhos/cm	08/28/2009 1200	Field
Turbidity	25.0			NTU	08/28/2009 1200	Field
Temperature	10.4			°C	08/28/2009 1200	Field
General Parameters						
pH	8.0	0.1		s.u.	08/31/2009 1548 CK	SM 4500 H B
Electrical Conductivity	922	5		µmhos/cm	08/31/2009 1548 CK	SM 2510B
Total Dissolved Solids (180)	590	10		mg/L	08/31/2009 1225 AMB	SM 2540
Solids, Total Dissolved (Calc)	540	10		mg/L	09/04/2009 1431 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	406	5		mg/L	08/31/2009 1548 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1117 SK	EPA 350.1
Gross Alpha	37.3 ± 4.4	2		pCi/L	09/16/2009 1546 SH	SM 7110B
Gross Beta	15.2 ± 2.8	3		pCi/L	09/16/2009 1546 SH	SM 7110B
Radium 226	0.33 ± 0.22	0.2		pCi/L	09/17/2009 1349 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/22/2009 2027 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	495	5		mg/L	08/31/2009 1548 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/31/2009 1548 CK	SM 2320B
Chloride	6	1		mg/L	09/01/2009 707 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/31/2009 1548 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.9	0.1		mg/L	08/31/2009 1601 SK	EPA 353.2
Sulfate	98	1		mg/L	09/01/2009 707 KO	EPA 300.0
Cations						
Calcium	74	1		mg/L	09/01/2009 1950 DG	EPA 200.7
Magnesium	36	1		mg/L	09/01/2009 1950 DG	EPA 200.7
Potassium	5	1		mg/L	09/01/2009 1950 DG	EPA 200.7
Sodium	76	1		mg/L	09/01/2009 1950 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/23/2009
Report ID: S0908499001

Project: Ross Project
Lab ID: S0908499-002
Client Sample ID: P84665W
COC: 125604

Work Order: S0908499
Collection Date: 8/28/2009 12:00:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.11	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Chloride	0.17	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Nitrate + Nitrite as N	0.06	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Sulfate	2.03	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Calcium	3.66	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Magnesium	2.96	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Potassium	0.13	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Sodium	3.32	0.01		meq/L	09/04/2009 1431 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.08	0		meq/L	09/04/2009 1431 KO	SM 1030E
Anion Sum	10.40	0		meq/L	09/04/2009 1431 KO	SM 1030E
Cation-Anion Balance	1.55	0		%	09/04/2009 1431 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/01/2009 1950 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/31/2009 1216 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/31/2009 1216 MS	EPA 200.8
Boron	ND	0.1		mg/L	09/01/2009 1950 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/31/2009 1216 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/01/2009 1950 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/31/2009 1216 MS	EPA 200.8
Iron	0.07	0.05		mg/L	09/01/2009 1950 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/31/2009 1216 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/01/2009 1018 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/31/2009 1216 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/01/2009 1950 DG	EPA 200.7
Selenium	0.009	0.005		mg/L	08/31/2009 1216 MS	EPA 200.8
Uranium	0.056	0.001		mg/L	08/31/2009 1216 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/31/2009 1216 MS	EPA 200.8
Zinc	0.08	0.01		mg/L	09/01/2009 1950 DG	EPA 200.7
Total Metals - 200.2						
Iron	3.75	0.05		mg/L	09/01/2009 2222 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	09/01/2009 2222 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009
Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-002
Client Sample ID: SB Well 01
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 4:00:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.73			s.u.	08/27/2009 1600	Field
Conductivity	1088			µmhos/cm	08/27/2009 1600	Field
Turbidity	3.08			NTU	08/27/2009 1600	Field
Temperature	14.4			°C	08/27/2009 1600	Field
General Parameters						
pH	8.7	0.1		s.u.	08/31/2009 1351 CK	SM 4500 H B
Electrical Conductivity	1170	5		µmhos/cm	08/31/2009 1351 CK	SM 2510B
Total Dissolved Solids (180)	740	10		mg/L	08/31/2009 1200 AMB	SM 2540
Solids, Total Dissolved (Calc)	730	10		mg/L	09/09/2009 1002 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	531	5		mg/L	08/31/2009 1351 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/09/2009 1113 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	09/09/2009 000 SH	SM 7110B
Gross Beta	3.4 ± 2.3	3		pCi/L	09/09/2009 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	09/08/2009 1508 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	09/08/2009 2033 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	609	5		mg/L	08/31/2009 1351 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	20	5		mg/L	08/31/2009 1351 CK	SM 2320B
Chloride	1	1		mg/L	08/31/2009 2150 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/31/2009 1351 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/31/2009 1434 SK	EPA 353.2
Sulfate	96	1		mg/L	08/31/2009 2150 KO	EPA 300.0
Cations						
Calcium	1	1		mg/L	09/08/2009 2054 DG	EPA 200.7
Magnesium	ND	1		mg/L	09/08/2009 2054 DG	EPA 200.7
Potassium	2	1		mg/L	09/08/2009 2054 DG	EPA 200.7
Sodium	313	1		mg/L	09/01/2009 1929 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/11/2009
Report ID: S0908498001

Project: Ross Project
Lab ID: S0908498-002
Client Sample ID: SB Well 01
COC: 125603

Work Order: S0908498
Collection Date: 8/27/2009 4:00:00 PM
Date Received: 8/28/2009 4:10:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.97	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Carbonate as CO ₃	0.65	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Chloride	0.03	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sulfate	2.00	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Calcium	0.06	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Magnesium	ND	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Potassium	0.06	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Sodium	13.63	0.01		meq/L	09/09/2009 1002 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	13.76	0		meq/L	09/09/2009 1002 KO	SM 1030E
Anion Sum	12.67	0		meq/L	09/09/2009 1002 KO	SM 1030E
Cation-Anion Balance	4.13	0		%	09/09/2009 1002 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	09/01/2009 1929 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	08/31/2009 1155 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/31/2009 1155 MS	EPA 200.8
Boron	0.1	0.1		mg/L	09/01/2009 1929 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/31/2009 1155 MS	EPA 200.8
Chromium	ND	0.01		mg/L	09/01/2009 1929 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/31/2009 1155 MS	EPA 200.8
Iron	ND	0.05		mg/L	09/01/2009 1929 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/31/2009 1155 MS	EPA 200.8
Mercury	ND	0.001		mg/L	09/01/2009 1004 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/31/2009 1155 MS	EPA 200.8
Nickel	ND	0.01		mg/L	09/01/2009 1929 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/31/2009 1155 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	08/31/2009 1155 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/31/2009 1155 MS	EPA 200.8
Zinc	ND	0.01		mg/L	09/01/2009 1929 DG	EPA 200.7
Total Metals - 200.2						
Iron	ND	0.05		mg/L	09/01/2009 2212 DG	EPA 200.7
Manganese	ND	0.02		mg/L	09/01/2009 2212 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants

1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009

Report ID: S0907561003
(Replaces S0907561002)

Project: Ross Project
Lab ID: S0907561-001
Client Sample ID: TWO1
COC: 126097

Work Order: S0907561
Collection Date: 7/29/2009 10:00:00 AM
Date Received: 7/30/2009 8:05:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.25			s.u.	07/29/2009 1000	Field
Conductivity	1616			µmhos/cm	07/29/2009 1000	Field
Water Level	27.7			ft	07/29/2009 1000	Field
Temperature	11.6			°C	07/29/2009 1000	Field
General Parameters						
pH	8.4	0.1		s.u.	07/31/2009 1525 CK	SM 4500 H B
Electrical Conductivity	2000	5		µmhos/cm	07/31/2009 1525 CK	SM 2510B
Total Dissolved Solids (180)	1350	10		mg/L	07/31/2009 1020 MJH	SM 2540
Solids, Total Dissolved (Calc)	1370	10		mg/L	08/10/2009 1011 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	836	5		mg/L	08/07/2009 1155 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2009 1159 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	08/07/2009 628 SH	SM 7110B
Gross Beta	ND	3		pCi/L	08/07/2009 628 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	08/12/2009 1506 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/13/2009 2004 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	935	5		mg/L	08/07/2009 1155 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	42	5		mg/L	08/07/2009 1155 CK	SM 2320B
Chloride	8	1		mg/L	08/02/2009 910 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	07/31/2009 1525 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.05		mg/L	08/04/2009 1739 SK	EPA 353.2
Sulfate	331	1		mg/L	08/02/2009 910 KO	EPA 300.0
Cations						
Calcium	9	1		mg/L	07/31/2009 1545 AB	EPA 200.7
Magnesium	4	1		mg/L	07/31/2009 1545 AB	EPA 200.7
Potassium	7	1		mg/L	07/31/2009 1545 AB	EPA 200.7
Sodium	509	1		mg/L	07/31/2009 1545 AB	EPA 200.7

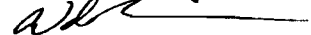
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0907561003
(Replaces S0907561002)

Project: Ross Project
Lab ID: S0907561-001
Client Sample ID: TWO1
COC: 126097

Work Order: S0907561
Collection Date: 7/29/2009 10:00:00 AM
Date Received: 7/30/2009 8:05:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	15.32	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Carbonate as CO ₃	1.40	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Chloride	0.22	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Sulfate	6.89	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Calcium	0.45	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Magnesium	0.36	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Potassium	0.18	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Sodium	22.14	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.14	0		meq/L	08/10/2009 1011 KO	SM 1030E
Anion Sum	23.90	0		meq/L	08/10/2009 1011 KO	SM 1030E
Cation-Anion Balance	1.62	0		%	08/10/2009 1011 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/31/2009 1545 AB	EPA 200.7
Arsenic	ND	0.005		mg/L	07/31/2009 1159 MS	EPA 200.8
Barium	ND	0.1		mg/L	07/31/2009 1159 MS	EPA 200.8
Boron	0.59	0.03		mg/L	07/31/2009 1545 AB	EPA 200.7
Cadmium	ND	0.0001		mg/L	07/31/2009 1159 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/31/2009 1545 AB	EPA 200.7
Copper	0.001	0.001		mg/L	08/03/2009 1431 MS	EPA 200.8
Iron	ND	0.03		mg/L	07/31/2009 1545 AB	EPA 200.7
Lead	ND	0.002		mg/L	07/31/2009 1159 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/05/2009 1052 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/31/2009 1159 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/31/2009 1545 AB	EPA 200.7
Selenium	ND	0.005		mg/L	07/31/2009 1159 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/31/2009 1159 MS	EPA 200.8
Vanadium	ND	0.01		mg/L	07/31/2009 1159 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/31/2009 1545 AB	EPA 200.7
Total Metals - 200.2						
Iron	0.04	0.03		mg/L	08/03/2009 1845 AB	EPA 200.7
Manganese	0.01	0.01		mg/L	08/03/2009 1845 AB	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0907561003
(Replaces S0907561002)

Project: Ross Project
Lab ID: S0907561-002
Client Sample ID: TWO2
COC: 126097

Work Order: S0907561
Collection Date: 7/29/2009 10:30:00 AM
Date Received: 7/30/2009 8:05:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.15			s.u.	07/29/2009 1030	Field
Conductivity	1922			µmhos/cm	07/29/2009 1030	Field
water level	20.4			ft	07/29/2009 1030	Field
Temperature	10.9			°C	07/29/2009 1030	Field
General Parameters						
pH	8.3	0.1		s.u.	07/31/2009 1539 CK	SM 4500 H B
Electrical Conductivity	2190	5		µmhos/cm	07/31/2009 1539 CK	SM 2510B
Total Dissolved Solids (180)	1500	10		mg/L	07/31/2009 1025 MJH	SM 2540
Solids, Total Dissolved (Calc)	1560	10		mg/L	08/10/2009 1011 KO	SM 1030E
Alkalinity, Total (As CaCO3)	646	5		mg/L	07/31/2009 1539 CK	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	08/04/2009 1200 SK	EPA 350.1
Gross Alpha	2.4 ± 1.8	2		pCi/L	08/07/2009 628 SH	SM 7110B
Gross Beta	ND	3		pCi/L	08/07/2009 628 SH	SM 7110B
Radium 226	0.45 ± 0.24	0.2		pCi/L	08/12/2009 1506 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	08/13/2009 2004 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO3	780	5		mg/L	07/31/2009 1539 CK	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	07/31/2009 1539 CK	SM 2320B
Chloride	15	1		mg/L	08/02/2009 924 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	07/31/2009 1539 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.05		mg/L	08/04/2009 1740 SK	EPA 353.2
Sulfate	576	1		mg/L	08/02/2009 924 KO	EPA 300.0
Cations						
Calcium	19	1		mg/L	07/31/2009 1554 AB	EPA 200.7
Magnesium	8	1		mg/L	07/31/2009 1554 AB	EPA 200.7
Potassium	11	1		mg/L	07/31/2009 1554 AB	EPA 200.7
Sodium	543	1		mg/L	07/31/2009 1554 AB	EPA 200.7

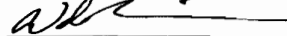
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 9/10/2009
Report ID: S0907561003
(Replaces S0907561002)

Project: Ross Project
Lab ID: S0907561-002
Client Sample ID: TWO2
COC: 126097

Work Order: S0907561
Collection Date: 7/29/2009 10:30:00 AM
Date Received: 7/30/2009 8:05:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.78	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Chloride	0.42	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Sulfate	11.98	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Calcium	0.95	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Magnesium	0.65	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Potassium	0.28	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Sodium	23.62	0.01		meq/L	08/10/2009 1011 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	25.51	0		meq/L	08/10/2009 1011 KO	SM 1030E
Anion Sum	25.36	0		meq/L	08/10/2009 1011 KO	SM 1030E
Cation-Anion Balance	0.29	0		%	08/10/2009 1011 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/31/2009 1554 AB	EPA 200.7
Arsenic	ND	0.005		mg/L	07/31/2009 1202 MS	EPA 200.8
Barium	ND	0.1		mg/L	07/31/2009 1202 MS	EPA 200.8
Boron	0.52	0.03		mg/L	07/31/2009 1554 AB	EPA 200.7
Cadmium	ND	0.0001		mg/L	07/31/2009 1202 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/31/2009 1554 AB	EPA 200.7
Copper	0.002	0.001		mg/L	07/31/2009 1202 MS	EPA 200.8
Iron	0.06	0.03		mg/L	07/31/2009 1554 AB	EPA 200.7
Lead	ND	0.002		mg/L	07/31/2009 1202 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/05/2009 1054 RS	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/31/2009 1202 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/31/2009 1554 AB	EPA 200.7
Selenium	ND	0.005		mg/L	07/31/2009 1202 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/31/2009 1202 MS	EPA 200.8
Vanadium	ND	0.01		mg/L	07/31/2009 1202 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	07/31/2009 1554 AB	EPA 200.7
Total Metals - 200.2						
Iron	0.11	0.03		mg/L	08/03/2009 1848 AB	EPA 200.7
Manganese	0.02	0.01		mg/L	08/03/2009 1848 AB	EPA 200.7
Zinc	0.02	0.01		mg/L	08/03/2009 1848 AB	EPA 200.7

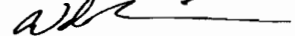
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 19XX18 Date: 10-21-09 Time: 1130

Landowner

Name: Merit Energy Company

Address _____

Phone# _____

Legal Location

Qtr/Qtr SE SW

SEC 18

TWN 53

RNG 67

Picture #(s) —

Stock _____

Domestic _____

SEO Permitted Facility Name: 19XX18

Permit No. P67747W

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 8.69

Cond. 3.08 mS

Temp. °C 8.71

Turbidity (ntu) 0.27 NTU

D.O. (mg/L) —

Water Level (ft): N/A

% Combustible Gas: —

Casing Height (ft): N/A

Ambient Air Temp: 9.4 °C

Comments: 12 bottles for sample - Water clear -
no odor - water fizzy. ~~Added~~ Added polonium 210,
Lead 210, and Thorium 230 to parameter list

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS WELL 01 Date: 10-23-09 Time: 0830

Landowner

Name: Carol Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr SWSW

SEC 20

TWN 53

RNG 67

Picture #(s) Already Taken

Stock ☒

Domestic ☒

SEO Permitted Facility Name: George/Carol Strong

Permit No. P132537W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

} Already Taken

Water Quality

pH 8.38

Cond. 1874 μ S

Temp. °C 11.3

Turbidity (ntu) 0.06

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 10.5°C

Comments: Water clear - no odor - added polonium 210, Lead 210, and Thorium 230 to sample parameters list, - 12 sample bottles

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS WELL 03 Date: 10-23-09 Time: 1030
P619W

Landowner

Name: Carol Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr NENE

SEC 30

TWN 53

RNG 67

Picture #(s) already taken

Stock ✓

Domestic ✓

SEO Permitted Facility Name: Ray W. Robinson Permit No. P619W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

} already taken

Water Quality

pH 8.09

Cond. 682 μ S

Temp. °C 10.4°C

Turbidity (ntu) 84.5 NTU

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): Below ground
Shelter

Ambient Air Temp: ~~7.5~~ 10.5°C

Comments: Shallow well - old - Pump for app.
10 min then run out of water. Fast recharge -
Water dirty - may clean up if used. 8 sample
bottles

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: DW WELL 01 Date: 10-21-09 Time: 1030

Landowner

Name: Dale Wood

Address _____

Phone# _____

Legal Location

Qtr/Qtr SE NW

SEC 17

TWN 53

RNG 67

Picture #(s) —

Stock _____

Domestic ☒

SEO Permitted Facility Name: —

Permit No. —

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 8.29

Cond. 3.25 mS

Temp. °C 10.2°C

Turbidity (ntu) 37.7 NTU

D.O. (mg/L) —

Flow = 4902/22.38 sec

Water Level (ft): N/A

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 9.0°C

Comments: Quarterly well sample - 8 sample bottles -
water still cloudy - no smell

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P 22582 R Date: 10-22-09 Time: 0830

Landowner

Name: Tony Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr SW SW

SEC 19

TWN 53

RNG 67

Picture #(s) 1

Stock ✓

Domestic _____

SEO Permitted Facility Name: Grace I. Reynolds Permit No. P 22582R

Location (Decimal Degrees)

Lat 44.55861

Long 104.96187

Elev. 4225

Water Quality

pH 8.90

Cond. 1026 μ S

Temp. °C 8.7°C

Turbidity (ntu) 1.99 NTU

D.O. (mg/L) _____

Water Level (ft): N/A

% Combustible Gas: —

Casing Height (ft): 2.00'

Ambient Air Temp: 6.0°C

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P31770W / P98245W Date: 11-18-09 Time: 1400

Landowner

Name: Clint and Twitten Wastones

Address _____

Phone# _____

Legal Location

Qtr/Qtr NW NW ?

SEC 6

TWN 52

RNG 67

Picture #(s) —

Stock _____

Domestic ✓

SEO Permitted Facility Name: —

Permit No. P31770W
P98245W

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 7.96

Cond. 3.32 MS

Temp. °C 8.7°C

Turbidity (ntu) 0.69 NTU

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: ~60°F

Comments: C & T house well - clear no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P 50113 W Date: 11-18-09 Time: 1200

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr SWNE

SEC 2

TWN 53

RNG 68

Picture #(s) —

Stock ✓

Domestic _____

SEO Permitted Facility Name: Harold Burch

Permit No. P 50113W

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 7.64

Cond. 1757 μ S

Temp. °C 8.0 °C

Turbidity (ntu) 0.18 NTU

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 50°F

Comments: Geopole well below Strany's house

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P 71108 W - RAW Date: 11-18-09 Time: 1030
Dallas and Anna's house well

Landowner

Name: Stormy & Becky Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr NESE

SEC 2

TWN 53

RNG 68

Picture #(s) —

Stock _____

Domestic ☒

SEO Permitted Facility Name: Phillina Blatt

Permit No. P 71108 W

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 7.62

Cond. 1940 μ S

Temp. °C 10.6°C

Turbidity (ntu) 0.25 NTU

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: 51°F

Comments: Low water prior to treatment from
R.O. treatment - Taken at kitchen sink tap.
Water clear - no odor - Anna said straw
Water does smell sometimes during the
year.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P71177W P17177W Date: 11-18-09 Time: 1100

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr SE NW

SEC 1

TWN 53

RNG 68

Picture #(s) —

Stock ☒

Domestic _____

SEO Permitted Facility Name: Philena^M. Blatt

Permit No. P71177W

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 7.48

Cond. 998 μ S

Temp. °C 8.3°C

Turbidity (ntu) 0.82 NTU

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: 51°F

Comments: Stock well - feeds tank

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SB Well 01 Date: 11-18-09 Time: 1230

Landowner

Name: Burck

Address _____

Phone# _____

Legal Location

Qtr/Qtr SE NW

SEC 2

TWN 53

RNG 68

Picture #(s) -

Stock ☒

Domestic ☒

SEO Permitted Facility Name: -

Permit No. -

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 9.09

Cond. 1201 μ S

Temp. °C 9.9°C

Turbidity (ntu) 0.37 NTU

D.O. (mg/L) -

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Burck's main well - houses and stock tanks.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TS WELL 01 Date: 10-21-09 Time: 1630

Landowner

Name: Tony Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr SESE

SEC 8

TWN 53

RNG 68

Picture #(s) 1, 2

Stock _____

Domestic ☒

SEO Permitted Facility Name: ?

Permit No. ?

Location (Decimal Degrees)

Lat N 44.58809

Long W. 105.04617

Elev. 4429

GEO XH
YES

Water Quality

pH 8.81

Cond. 1303 μ S

Temp. °C 10.4°C

Turbidity (ntu) 2.54

D.O. (mg/L) _____

Water Level (ft): NA

% Combustible Gas: _____

Casing Height (ft): 1.7'

Ambient Air Temp: 15.7°C

Comments: Water clear - no smell - Fizzy water
8 sample bottles - Field Duplicate for this well (FBOI)

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW WELL 02 Date: 10-21-09 Time: 1330

Landowner

Name: TS Wesley

Address —

Phone# —

Legal Location

Qtr/Qtr SWSW

SEC 8

TWN 53

RNG 67

Picture #(s) —

Stock ✓

Domestic ✓

SEO Permitted Facility Name: VESTA LOUIS
WESLEY

Permit No. P103666W

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 8.29

Cond. 2.78 uS

Temp. °C 9.0°C

Turbidity (ntu) 0.57 MTU

D.O. (mg/L) —

Water Level (ft): 22.0'

% Combustible Gas: —

Casing Height (ft): — 1.5'

Ambient Air Temp: 10.8°C

Comments: Oskato field Office - Water clear - no
odor - 8 bottles sample



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-002
Client Sample ID: 19XX18
COC: 131110

Work Order: S0910350
Collection Date: 10/21/2009 11:30:00 AM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.69			s.u.	10/21/2009 1130	Field
Conductivity	3008			µmhos/cm	10/21/2009 1130	Field
Turbidity	0.27			NTU	10/21/2009 1130	Field
Temperature	8.71			°C	10/21/2009 1130	Field
General Parameters						
pH	8.6	0.1		s.u.	10/26/2009 1252 CK	SM 4500 H B
Electrical Conductivity	2360	5		µmhos/cm	10/26/2009 1252 CK	SM 2510B
Total Dissolved Solids (180)	1660	10		mg/L	10/26/2009 950 AMB	SM 2540
Solids, Total Dissolved (Calc)	1730	10		mg/L	11/12/2009 1140 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	659	5		mg/L	11/12/2009 000 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/30/2009 1231 SK	EPA 350.1
Gross Alpha	185.2 ± 9.8	2		pCi/L	11/09/2009 000 SH	SM 7110B
Gross Beta	39.7 ± 4.4	3.98		pCi/L	11/09/2009 000 SH	SM 7110B
Radium 226	47.23 ± 0.90	0.2		pCi/L	11/06/2009 2034 SH	SM 7500-Ra B
Total Radium 228	1.65 ± 0.86	1		pCi/L	11/11/2009 245 SH	Ra-05
Lead 210	2.41 ± 0.83	1		pCi/L	12/17/2009 1138 SH	OTW01
Polonium 210	ND	1		pCi/L	12/17/2009 1138 SH	OTW01
Thorium 230	ND	0.2		pCi/L	12/07/2009 1635 SH	ACW10
Anions						
Alkalinity, Bicarbonate as HCO ₃	770	5		mg/L	11/12/2009 000 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	17	5		mg/L	11/12/2009 000 KO	SM 2320B
Chloride	7	1		mg/L	11/12/2009 000 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	10/26/2009 1252 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	10/28/2009 1530 SK	EPA 353.2
Sulfate	685	1		mg/L	11/12/2009 000 KO	EPA 300.0
Cations						
Calcium	7	1		mg/L	11/10/2009 1947 DG	EPA 200.7
Magnesium	2	1		mg/L	11/10/2009 1947 DG	EPA 200.7
Potassium	5	1		mg/L	11/10/2009 1947 DG	EPA 200.7
Sodium	629	1		mg/L	11/10/2009 1947 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-002
Client Sample ID: 19XX18
COC: 131110

Work Order: S0910350
Collection Date: 10/21/2009 11:30:00 AM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.62	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Carbonate as CO ₃	0.55	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Chloride	0.19	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Nitrate + Nitrite as N	0.03	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sulfate	14.25	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Calcium	0.36	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Magnesium	0.20	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Potassium	0.12	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sodium	27.37	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	28.06	0		meq/L	11/12/2009 1140 KO	SM 1030E
Anion Sum	27.69	0		meq/L	11/12/2009 1140 KO	SM 1030E
Cation-Anion Balance	0.66	0		%	11/12/2009 1140 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/23/2009 1543 MS	EPA 200.7
Arsenic	ND	0.005		mg/L	10/23/2009 1654 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/23/2009 1654 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/23/2009 1543 MS	EPA 200.7
Cadmium	ND	0.002		mg/L	10/23/2009 1654 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/23/2009 1543 MS	EPA 200.7
Copper	ND	0.01		mg/L	10/23/2009 1654 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/23/2009 1543 MS	EPA 200.7
Lead	ND	0.02		mg/L	10/23/2009 1654 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/27/2009 1005 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/23/2009 1654 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/23/2009 1543 MS	EPA 200.7
Selenium	ND	0.005		mg/L	10/23/2009 1654 MS	EPA 200.8
Uranium	0.085	0.001		mg/L	10/23/2009 1654 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/23/2009 1654 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/23/2009 1543 MS	EPA 200.7
Total Metals						
Iron	0.14	0.05		mg/L	10/29/2009 101 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/29/2009 101 DG	EPA 200.7

These results apply only to the samples tested.

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910373002
(Replaces S0910373001)

Project: Ross Project
Lab ID: S0910373-001
Client Sample ID: CS Well 01
COC: 130765

Work Order: S0910373
Collection Date: 10/23/2009 8:30:00 AM
Date Received: 10/23/2009 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.38			s.u.	10/23/2009 830	Field
Conductivity	1874			µmhos/cm	10/23/2009 830	Field
Turbidity	0.06			NTU	10/23/2009 830	Field
Temperature	11.3			°C	10/23/2009 830	Field
General Parameters						
pH	8.4	0.1		s.u.	10/27/2009 1259 CK	SM 4500 H B
Electrical Conductivity	1880	5		µmhos/cm	10/27/2009 1259 CK	SM 2510B
Total Dissolved Solids (180)	1340	10		mg/L	10/27/2009 1330 AMB	SM 2540
Solids, Total Dissolved (Calc)	1230	10		mg/L	11/03/2009 742 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	633	5		mg/L	10/27/2009 1259 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/30/2009 1427 SK	EPA 350.1
Gross Alpha	16.3 ± 3.4	2		pCi/L	11/09/2009 000 SH	SM 7110B
Gross Beta	12.4 ± 3.9	4.09		pCi/L	11/09/2009 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	11/09/2009 1721 SH	SM 7500-Ra B
Total Radium 228	1.44 ± 0.75	1		pCi/L	11/16/2009 2205 SH	Ra-05
Lead 210	ND	1		pCi/L	12/15/2009 2120 SH	OTW01
Polonium 210	ND	1		pCi/L	12/15/2009 2120 SH	OTW01
Thorium 230	ND	0.2		pCi/L	12/07/2009 1635 SH	ACW10
Anions						
Alkalinity, Bicarbonate as HCO ₃	758	5		mg/L	10/27/2009 1259 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	7	5		mg/L	10/27/2009 1259 CK	SM 2320B
Chloride	3	1		mg/L	10/26/2009 2206 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	10/27/2009 1259 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.1	0.1		mg/L	10/28/2009 1632 SK	EPA 353.2
Sulfate	368	1		mg/L	10/26/2009 2206 KO	EPA 300.0
Cations						
Calcium	16	1		mg/L	10/31/2009 1303 DG	EPA 200.7
Magnesium	12	1		mg/L	10/31/2009 1303 DG	EPA 200.7
Potassium	9	1		mg/L	10/31/2009 1303 DG	EPA 200.7
Sodium	444	1		mg/L	10/31/2009 1303 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910373002
(Replaces S0910373001)

Project: Ross Project
Lab ID: S0910373-001
Client Sample ID: CS Well 01
COC: 130765

Work Order: S0910373
Collection Date: 10/23/2009 8:30:00 AM
Date Received: 10/23/2009 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.42	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Carbonate as CO ₃	0.24	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Chloride	0.08	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Sulfate	7.66	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Calcium	0.80	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Magnesium	0.97	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Potassium	0.22	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Sodium	19.30	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.30	0		meq/L	11/03/2009 742 KO	SM 1030E
Anion Sum	20.45	0		meq/L	11/03/2009 742 KO	SM 1030E
Cation-Anion Balance	2.03	0		%	11/03/2009 742 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/28/2009 2101 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/26/2009 1253 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/26/2009 1253 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/28/2009 2101 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/26/2009 1253 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/28/2009 2101 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/26/2009 1253 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/28/2009 2101 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/26/2009 1253 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/30/2009 1023 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/26/2009 1253 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/28/2009 2101 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/26/2009 1253 MS	EPA 200.8
Uranium	0.008	0.001		mg/L	10/26/2009 1253 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/26/2009 1253 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/28/2009 2101 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/29/2009 148 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/29/2009 148 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910373002
(Replaces S0910373001)

Project: Ross Project
Lab ID: S0910373-002
Client Sample ID: CS Well 03
COC: 130765

Work Order: S0910373
Collection Date: 10/23/2009 10:30:00 AM
Date Received: 10/23/2009 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.09			s.u.	10/23/2009 1030	Field
Conductivity	682			µmhos/cm	10/23/2009 1030	Field
Turbidity	84.5			NTU	10/23/2009 1030	Field
Temperature	10.4			°C	10/23/2009 1030	Field
General Parameters						
pH	8.2	0.1		s.u.	10/27/2009 1320 CK	SM 4500 H B
Electrical Conductivity	651	5		µmhos/cm	10/27/2009 1320 CK	SM 2510B
Total Dissolved Solids (180)	430	10		mg/L	10/27/2009 1335 AMB	SM 2540
Solids, Total Dissolved (Calc)	380	10		mg/L	11/03/2009 742 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	327	5		mg/L	10/27/2009 1320 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/30/2009 1428 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	11/09/2009 000 SH	SM 7110B
Gross Beta	8.5 ± 1.4	3		pCi/L	11/09/2009 000 SH	SM 7110B
Radium 226	0.40 ± 0.09	0.2		pCi/L	11/09/2009 1721 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	11/16/2009 2205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	399	5		mg/L	10/27/2009 1320 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	10/27/2009 1320 CK	SM 2320B
Chloride	4	1		mg/L	10/26/2009 2215 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	10/27/2009 1320 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/28/2009 1633 SK	EPA 353.2
Sulfate	32	1		mg/L	10/26/2009 2215 KO	EPA 300.0
Cations						
Calcium	28	1		mg/L	10/31/2009 1305 DG	EPA 200.7
Magnesium	15	1		mg/L	10/31/2009 1305 DG	EPA 200.7
Potassium	9	1		mg/L	10/31/2009 1305 DG	EPA 200.7
Sodium	97	1		mg/L	10/31/2009 1305 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910373002
(Replaces S0910373001)

Project: Ross Project
Lab ID: S0910373-002
Client Sample ID: CS Well 03
COC: 130765

Work Order: S0910373
Collection Date: 10/23/2009 10:30:00 AM
Date Received: 10/23/2009 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.54	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Chloride	0.11	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Fluoride	ND	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Sulfate	0.67	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Calcium	1.39	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Magnesium	1.23	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Potassium	0.23	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Sodium	4.20	0.01		meq/L	11/03/2009 742 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	7.06	0		meq/L	11/03/2009 742 KO	SM 1030E
Anion Sum	7.34	0		meq/L	11/03/2009 742 KO	SM 1030E
Cation-Anion Balance	1.89	0		%	11/03/2009 742 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/28/2009 2111 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/26/2009 1256 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/26/2009 1256 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/28/2009 2111 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/26/2009 1256 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/28/2009 2111 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/26/2009 1256 MS	EPA 200.8
Iron	0.16	0.05		mg/L	10/28/2009 2111 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/26/2009 1256 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/30/2009 1029 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/26/2009 1256 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/28/2009 2111 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/26/2009 1256 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	10/26/2009 1256 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/26/2009 1256 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/28/2009 2111 DG	EPA 200.7
Total Metals						
Iron	3.62	0.05		mg/L	10/29/2009 158 DG	EPA 200.7
Manganese	0.08	0.02		mg/L	10/29/2009 158 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-001
Client Sample ID: DW WELL 01
COC: 131110

Work Order: S0910350
Collection Date: 10/21/2009 10:30:00 AM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.29			s.u.	10/21/2009 1030	Field
Conductivity	3250			µmhos/cm	10/21/2009 1030	Field
Turbidity	37.7			NTU	10/21/2009 1030	Field
Temperature	10.22			°C	10/21/2009 1030	Field
General Parameters						
pH	8.5	0.1		s.u.	10/26/2009 2118 CK	SM 4500 H B
Electrical Conductivity	2560	5		µmhos/cm	10/26/2009 2118 CK	SM 2510B
Total Dissolved Solids (180)	1780	10		mg/L	10/26/2009 945 AMB	SM 2540
Solids, Total Dissolved (Calc)	1850	10		mg/L	11/12/2009 1140 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	589	5		mg/L	10/26/2009 2118 CK	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/30/2009 1230 SK	EPA 350.1
Gross Alpha	17.3 ± 3.3	2		pCi/L	11/09/2009 000 SH	SM 7110B
Gross Beta	11.8 ± 3.8	4.02		pCi/L	11/09/2009 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	11/06/2009 2034 SH	SM 7500-Ra B
Total Radium 228	2.84 ± 0.94	1		pCi/L	11/11/2009 245 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	682	5		mg/L	10/26/2009 2118 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	18	5		mg/L	10/26/2009 2118 CK	SM 2320B
Chloride	8	1		mg/L	10/23/2009 1430 KO	EPA 300.0
Fluoride	0.7	0.1		mg/L	10/26/2009 2118 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/28/2009 1529 SK	EPA 353.2
Sulfate	794	1		mg/L	10/23/2009 1430 KO	EPA 300.0
Cations						
Calcium	16	1		mg/L	10/23/2009 1541 MS	EPA 200.7
Magnesium	6	1		mg/L	10/23/2009 1541 MS	EPA 200.7
Potassium	12	1		mg/L	10/23/2009 1541 MS	EPA 200.7
Sodium	665	1		mg/L	10/23/2009 1541 MS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-001
Client Sample ID: DW WELL 01
COC: 131110

Work Order: S0910350
Collection Date: 10/21/2009 10:30:00 AM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.17	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Carbonate as CO ₃	0.61	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Chloride	0.22	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sulfate	16.52	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Calcium	0.80	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Magnesium	0.48	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Potassium	0.31	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sodium	28.91	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	30.51	0		meq/L	11/12/2009 1140 KO	SM 1030E
Anion Sum	28.57	0		meq/L	11/12/2009 1140 KO	SM 1030E
Cation-Anion Balance	3.27	0		%	11/12/2009 1140 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/23/2009 1541 MS	EPA 200.7
Arsenic	ND	0.005		mg/L	10/23/2009 1650 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/23/2009 1650 MS	EPA 200.8
Boron	0.6	0.1		mg/L	10/23/2009 1541 MS	EPA 200.7
Cadmium	ND	0.002		mg/L	10/23/2009 1650 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/23/2009 1541 MS	EPA 200.7
Copper	ND	0.01		mg/L	10/23/2009 1650 MS	EPA 200.8
Iron	0.21	0.05		mg/L	10/23/2009 1541 MS	EPA 200.7
Lead	ND	0.02		mg/L	10/23/2009 1650 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/27/2009 1003 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/23/2009 1650 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/23/2009 1541 MS	EPA 200.7
Selenium	ND	0.005		mg/L	10/23/2009 1650 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/23/2009 1650 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/23/2009 1650 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/23/2009 1541 MS	EPA 200.7
Total Metals						
Iron	2.73	0.05		mg/L	10/29/2009 058 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	10/29/2009 058 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 11/12/2009
Report ID: S0910349001

Project: Ross Project
Lab ID: S0910349-002
Client Sample ID: P22582P
COC: 131109

Work Order: S0910349
Collection Date: 10/22/2009 8:30:00 AM
Date Received: 10/22/2009 3:33:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.90			s.u.	10/22/2009 830	Field
Conductivity	1026			µmhos/cm	10/22/2009 830	Field
Turbidity	1.99			NTU	10/22/2009 830	Field
Temperature	8.7			°C	10/22/2009 830	Field
General Parameters						
pH	8.6	0.1		s.u.	10/26/2009 1717 CK	SM 4500 H B
Electrical Conductivity	972	5		µmhos/cm	10/26/2009 1717 CK	SM 2510B
Total Dissolved Solids (180)	610	10		mg/L	10/26/2009 940 AMB	SM 2540
Solids, Total Dissolved (Calc)	610	10		mg/L	10/30/2009 1141 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	440	5		mg/L	10/26/2009 1717 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/30/2009 1229 SK	EPA 350.1
Gross Alpha	2.7 ± 1.5	2		pCi/L	11/09/2009 000 SH	SM 7110B
Gross Beta	4.1 ± 2.4	3		pCi/L	11/09/2009 000 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	11/06/2009 2034 SH	SM 7500-Ra B
Total Radium 228	2.59 ± 0.94	1		pCi/L	11/11/2009 245 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	500	5		mg/L	10/26/2009 1717 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	18	5		mg/L	10/26/2009 1717 CK	SM 2320B
Chloride	4	1		mg/L	10/23/2009 1421 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	10/26/2009 1717 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/28/2009 1528 SK	EPA 353.2
Sulfate	85	1		mg/L	10/23/2009 1421 KO	EPA 300.0
Cations						
Calcium	12	1		mg/L	10/23/2009 1538 MS	EPA 200.7
Magnesium	6	1		mg/L	10/23/2009 1538 MS	EPA 200.7
Potassium	5	1		mg/L	10/23/2009 1538 MS	EPA 200.7
Sodium	234	1		mg/L	10/23/2009 1538 MS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 11/12/2009
Report ID: S0910349001

Project: Ross Project
Lab ID: S0910349-002
Client Sample ID: P22582P
COC: 131109

Work Order: S0910349
Collection Date: 10/22/2009 8:30:00 AM
Date Received: 10/22/2009 3:33:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.19	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Carbonate as CO ₃	0.60	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Chloride	0.12	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Sulfate	1.77	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Calcium	0.58	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Magnesium	0.45	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Potassium	0.12	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Sodium	10.16	0.01		meq/L	10/30/2009 1141 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	11.34	0		meq/L	10/30/2009 1141 KO	SM 1030E
Anion Sum	10.72	0		meq/L	10/30/2009 1141 KO	SM 1030E
Cation-Anion Balance	2.83	0		%	10/30/2009 1141 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/23/2009 1538 MS	EPA 200.7
Arsenic	ND	0.005		mg/L	10/23/2009 1647 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/23/2009 1647 MS	EPA 200.8
Boron	0.2	0.1		mg/L	10/23/2009 1538 MS	EPA 200.7
Cadmium	ND	0.002		mg/L	10/23/2009 1647 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/23/2009 1538 MS	EPA 200.7
Copper	ND	0.01		mg/L	10/23/2009 1647 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/23/2009 1538 MS	EPA 200.7
Lead	ND	0.02		mg/L	10/23/2009 1647 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/27/2009 950 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/23/2009 1647 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/23/2009 1538 MS	EPA 200.7
Selenium	ND	0.005		mg/L	10/23/2009 1647 MS	EPA 200.8
Uranium	0.003	0.001		mg/L	10/23/2009 1647 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/23/2009 1647 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/23/2009 1538 MS	EPA 200.7
Total Metals						
Iron	0.22	0.05		mg/L	10/29/2009 056 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/29/2009 056 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-003
Client Sample ID: P31770W/P98245W
COC: 131196

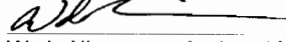
Work Order: S0911284
Collection Date: 11/18/2009 2:00:00 PM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.96	s.u.			11/18/2009 1400	Field
Conductivity	3320	µm		hos/cm	11/18/2009 1400	Field
Turbidity	0.69	NT		U	11/18/2009 1400	Field
Temperature	8.7	°C			11/18/2009 1400	Field
General Parameters						
pH	8.2	0.1		s.u.	11/20/2009 1504 KO	SM 4500 H B
Electrical Conductivity	2550	5		µmhos/cm	11/20/2009 1504 KO	SM 2510B
Total Dissolved Solids (180)	1920	10		mg/L	11/19/2009 1545 AMB	SM 2540
Solids, Total Dissolved (Calc)	1780	10		mg/L	12/01/2009 925 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	504	5		mg/L	11/20/2009 1504 KO	SM 2320B
Gross Alpha	36.8 ± 4.9	2		pCi/L	11/30/2009 953 SH	SM 7110B
Gross Beta	17.1 ± 3.9	3		pCi/L	11/30/2009 953 SH	SM 7110B
Anions						
Alkalinity, Bicarbonate as HCO ₃	615	5		mg/L	11/20/2009 1504 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	11/20/2009 1504 KO	SM 2320B
Chloride	21	1		mg/L	11/20/2009 117 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	11/20/2009 1504 KO	SM 4500FC
Sulfate	853	1		mg/L	11/20/2009 117 KO	EPA 300.0
Cations						
Calcium	56	1		mg/L	11/19/2009 1654 DG	EPA 200.7
Magnesium	23	1		mg/L	11/19/2009 1654 DG	EPA 200.7
Potassium	12	1		mg/L	11/19/2009 1654 DG	EPA 200.7
Sodium	514	1		mg/L	11/19/2009 1654 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.08	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Chloride	0.59	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sulfate	17.76	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Calcium	2.78	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Magnesium	1.87	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Potassium	0.29	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sodium	22.37	0.01		meq/L	12/01/2009 925 KO	SM 1030E

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010

Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-003
Client Sample ID: P31770W/P98245W
COC: 131196

Work Order: S0911284
Collection Date: 11/18/2009 2:00:00 PM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	27.32	0		meq/L	12/01/2009 925 KO	SM 1030E
Anion Sum	28.45	0		meq/L	12/01/2009 925 KO	SM 1030E
Cation-Anion Balance	2.02	0		%	12/01/2009 925 KO	SM 1030E
Dissolved Metals						
Selenium	ND	0.005		mg/L	11/20/2009 1010 MS	EPA 200.8
Uranium	0.015	0.001		mg/L	11/20/2009 1010 MS	EPA 200.8

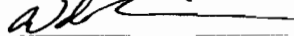
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010

Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-001
Client Sample ID: P50113W
COC: 131196

Work Order: S0911284
Collection Date: 11/18/2009 12:00:00 PM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.64	s.u.			11/18/2009 1200	Field
Conductivity	1757	µm		hos/cm	11/18/2009 1200	Field
Turbidity	0.18	NT		U	11/18/2009 1200	Field
Temperature	8.0	°C			11/18/2009 1200	Field
General Parameters						
pH	8.0	0.1		s.u.	11/20/2009 1444 KO	SM 4500 H B
Electrical Conductivity	1710	5		µmhos/cm	11/20/2009 1444 KO	SM 2510B
Total Dissolved Solids (180)	1150	10		mg/L	11/19/2009 1535 AMB	SM 2540
Solids, Total Dissolved (Calc)	1010	10		mg/L	12/01/2009 925 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	553	5		mg/L	11/20/2009 1444 KO	SM 2320B
Gross Alpha	90.4 ± 6.8	2		pCi/L	11/30/2009 953 SH	SM 7110B
Gross Beta	37.3 ± 4.4	3		pCi/L	11/30/2009 953 SH	SM 7110B
Anions						
Alkalinity, Bicarbonate as HCO ₃	675	5		mg/L	11/20/2009 1444 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	11/20/2009 1444 KO	SM 2320B
Chloride	48	1		mg/L	11/20/2009 052 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	11/20/2009 1444 KO	SM 4500FC
Sulfate	259	1		mg/L	11/20/2009 052 KO	EPA 300.0
Cations						
Calcium	111	1		mg/L	11/19/2009 1649 DG	EPA 200.7
Magnesium	60	1		mg/L	11/19/2009 1649 DG	EPA 200.7
Potassium	7	1		mg/L	11/19/2009 1649 DG	EPA 200.7
Sodium	190	1		mg/L	11/19/2009 1649 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.06	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Chloride	1.35	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sulfate	5.38	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Calcium	5.51	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Magnesium	4.95	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Potassium	0.17	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sodium	8.24	0.01		meq/L	12/01/2009 925 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010

Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-001
Client Sample ID: P50113W
COC: 131196

Work Order: S0911284
Collection Date: 11/18/2009 12:00:00 PM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	18.90	0		meq/L	12/01/2009 925 KO	SM 1030E
Anion Sum	17.81	0		meq/L	12/01/2009 925 KO	SM 1030E
Cation-Anion Balance	2.96	0		%	12/01/2009 925 KO	SM 1030E
Dissolved Metals						
Selenium	0.026	0.005		mg/L	11/20/2009 1003 MS	EPA 200.8
Uranium	0.210	0.001		mg/L	11/20/2009 1003 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010

Report ID: S0911280002
(Replaces S0911280001)

Project: Ross Project
Lab ID: S0911280-002
Client Sample ID: P71108W-Raw
COC: 131195


Work Order: S0911280
Collection Date: 11/18/2009 10:30:00 AM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.62	s.u.			11/18/2009 1030	Field
Conductivity	1940	µm		hos/cm	11/18/2009 1030	Field
Turbidity	0.25	NT		U	11/18/2009 1030	Field
Temperature	10.6	°C			11/18/2009 1030	Field
General Parameters						
pH	7.9	0.1		s.u.	11/20/2009 1304 KO	SM 4500 H B
Electrical Conductivity	1930	5		µmhos/cm	11/20/2009 1304 KO	SM 2510B
Total Dissolved Solids (180)	1460	10		mg/L	11/19/2009 1530 AMB	SM 2540
Solids, Total Dissolved (Calc)	1440	10		mg/L	11/24/2009 1237 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	572	5		mg/L	11/20/2009 1304 KO	SM 2320B
Gross Alpha	59.2 ± 5.7	2		pCi/L	11/30/2009 953 SH	SM 7110B
Gross Beta	22.3 ± 4.1	3		pCi/L	11/30/2009 953 SH	SM 7110B
Anions						
Alkalinity, Bicarbonate as HCO ₃	698	5		mg/L	11/20/2009 1304 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	11/20/2009 1304 KO	SM 2320B
Chloride	7	1		mg/L	11/19/2009 1742 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	11/20/2009 1304 KO	SM 4500FC
Sulfate	601	1		mg/L	11/23/2009 945 KO	EPA 300.0
Cations						
Calcium	75	1		mg/L	11/19/2009 1647 DG	EPA 200.7
Magnesium	79	1		mg/L	11/19/2009 1647 DG	EPA 200.7
Potassium	9	1		mg/L	11/19/2009 1647 DG	EPA 200.7
Sodium	328	1		mg/L	11/19/2009 1647 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.44	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Chloride	0.21	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Sulfate	12.50	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Calcium	3.74	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Magnesium	6.50	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Potassium	0.23	0.01		meq/L	11/24/2009 1237 KO	SM 1030E
Sodium	14.25	0.01		meq/L	11/24/2009 1237 KO	SM 1030E

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S0911280002
(Replaces S0911280001)

Project: Ross Project
Lab ID: S0911280-002
Client Sample ID: P71108W-Raw
COC: 131195

Work Order: S0911280
Collection Date: 11/18/2009 10:30:00 AM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	24.73	0		meq/L	11/24/2009 1237 KO	SM 1030E
Anion Sum	24.17	0		meq/L	11/24/2009 1237 KO	SM 1030E
Cation-Anion Balance	1.14	0		%	11/24/2009 1237 KO	SM 1030E
Dissolved Metals						
Selenium	0.015	0.005		mg/L	11/20/2009 959 MS	EPA 200.8
Uranium	0.094	0.001		mg/L	11/20/2009 959 MS	EPA 200.8

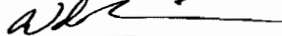
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-004
Client Sample ID: P17177W
COC: 131196

Work Order: S0911284
Collection Date: 11/18/2009 11:00:00 AM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.48	s.u.			11/18/2009 1100	Field
Conductivity	998	µm		hos/cm	11/18/2009 1100	Field
Turbidity	0.82	NT		U	11/18/2009 1100	Field
Temperature	8.3	°C			11/18/2009 1100	Field
General Parameters						
pH	7.9	0.1		s.u.	11/20/2009 1514 KO	SM 4500 H B
Electrical Conductivity	904	5		µmhos/cm	11/20/2009 1514 KO	SM 2510B
Total Dissolved Solids (180)	580	10		mg/L	11/19/2009 1555 AMB	SM 2540
Solids, Total Dissolved (Calc)	500	10		mg/L	12/01/2009 925 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	415	5		mg/L	11/25/2009 1344 KO	SM 2320B
Gross Alpha	12.1 ± 2.0	2		pCi/L	11/30/2009 953 SH	SM 7110B
Gross Beta	7.3 ± 2.0	3		pCi/L	11/30/2009 953 SH	SM 7110B
Anions						
Alkalinity, Bicarbonate as HCO ₃	507	5		mg/L	11/25/2009 1344 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	11/25/2009 1344 KO	SM 2320B
Chloride	20	1		mg/L	11/20/2009 130 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	11/20/2009 1514 KO	SM 4500FC
Sulfate	41	1		mg/L	11/20/2009 130 KO	EPA 300.0
Cations						
Calcium	117	1		mg/L	11/23/2009 2225 MS	EPA 200.7
Magnesium	31	1		mg/L	11/23/2009 2225 MS	EPA 200.7
Potassium	5	1		mg/L	11/23/2009 2225 MS	EPA 200.7
Sodium	38	1		mg/L	11/23/2009 2225 MS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.30	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Chloride	0.57	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Fluoride	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sulfate	0.85	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Calcium	5.83	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Magnesium	2.52	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Potassium	0.13	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sodium	1.63	0.01		meq/L	12/01/2009 925 KO	SM 1030E

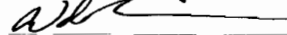
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-004
Client Sample ID: P17177W
COC: 131196

Work Order: S0911284
Collection Date: 11/18/2009 11:00:00 AM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	10.12	0		meq/L	12/01/2009 925 KO	SM 1030E
Anion Sum	9.74	0		meq/L	12/01/2009 925 KO	SM 1030E
Cation-Anion Balance	1.93	0		%	12/01/2009 925 KO	SM 1030E
Dissolved Metals						
Selenium	0.005	0.005		mg/L	11/20/2009 1020 MS	EPA 200.8
Uranium	0.024	0.001		mg/L	11/20/2009 1020 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-002
Client Sample ID: SB Well 01
COC: 131196

Work Order: S0911284
Collection Date: 11/18/2009 12:30:00 PM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.09	s.u.			11/18/2009 1230	Field
Conductivity	1201	µm		hos/cm	11/18/2009 1230	Field
Turbidity	0.37	NT		U	11/18/2009 1230	Field
Temperature	9.9	°C			11/18/2009 1230	Field
General Parameters						
pH	8.6	0.1		s.u.	11/20/2009 1454 KO	SM 4500 H B
Electrical Conductivity	1130	5		µmhos/cm	11/20/2009 1454 KO	SM 2510B
Total Dissolved Solids (180)	740	10		mg/L	11/19/2009 1540 AMB	SM 2540
Solids, Total Dissolved (Calc)	700	10		mg/L	12/01/2009 925 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	533	5		mg/L	11/20/2009 1454 KO	SM 2320B
Gross Alpha	2.5 ± 1.7	2		pCi/L	11/30/2009 953 SH	SM 7110B
Gross Beta	ND	3		pCi/L	11/30/2009 953 SH	SM 7110B
Anions						
Alkalinity, Bicarbonate as HCO ₃	600	5		mg/L	11/20/2009 1454 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	24	5		mg/L	11/20/2009 1454 KO	SM 2320B
Chloride	1	1		mg/L	11/20/2009 105 KO	EPA 300.0
Fluoride	ND	0.1		mg/L	11/20/2009 1454 KO	SM 4500FC
Sulfate	102	1		mg/L	11/20/2009 105 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	11/19/2009 1652 DG	EPA 200.7
Magnesium	ND	1		mg/L	11/19/2009 1652 DG	EPA 200.7
Potassium	3	1		mg/L	11/19/2009 1652 DG	EPA 200.7
Sodium	268	1		mg/L	11/19/2009 1652 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.83	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Carbonate as CO ₃	0.81	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Chloride	0.03	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Fluoride	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sulfate	2.11	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Calcium	0.10	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Magnesium	ND	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Potassium	0.06	0.01		meq/L	12/01/2009 925 KO	SM 1030E
Sodium	11.64	0.01		meq/L	12/01/2009 925 KO	SM 1030E

These results apply only to the samples tested.

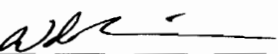
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:


Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/24/2010
Report ID: S0911284002
(Replaces S0911284001)

Project: Ross Project
Lab ID: S0911284-002
Client Sample ID: SB Well 01
COC: 131196

Work Order: S0911284
Collection Date: 11/18/2009 12:30:00 PM
Date Received: 11/19/2009 8:15:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation / Anion Balance						
Cation Sum	11.81	0		meq/L	12/01/2009 925 KO	SM 1030E
Anion Sum	12.80	0		meq/L	12/01/2009 925 KO	SM 1030E
Cation-Anion Balance	4.00	0		%	12/01/2009 925 KO	SM 1030E
Dissolved Metals						
Selenium	ND	0.005		mg/L	11/20/2009 1006 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	11/20/2009 1006 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-004
Client Sample ID: TS WELL 01
COC: 131110

Work Order: S0910350
Collection Date: 10/22/2009 4:30:00 PM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.81			s.u.	10/22/2009 1630	Field
Conductivity	1303			µmhos/cm	10/22/2009 1630	Field
Turbidity	2540			NTU	10/22/2009 1630	Field
Temperature	10.4			°C	10/22/2009 1630	Field
General Parameters						
pH	8.7	0.1		s.u.	10/26/2009 1751 CK	SM 4500 H B
Electrical Conductivity	1300	5		µmhos/cm	10/26/2009 1751 CK	SM 2510B
Total Dissolved Solids (180)	910	10		mg/L	10/26/2009 1005 AMB	SM 2540
Solids, Total Dissolved (Calc)	840	10		mg/L	11/12/2009 1140 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	587	5		mg/L	10/26/2009 1751 CK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/30/2009 1233 SK	EPA 350.1
Gross Alpha	10.8 ± 2.6	2		pCi/L	11/09/2009 000 SH	SM 7110B
Gross Beta	7.3 ± 2.5	3		pCi/L	11/09/2009 000 SH	SM 7110B
Radium 226	0.46 ± 0.13	0.2		pCi/L	11/06/2009 2034 SH	SM 7500-Ra B
Total Radium 228	1.17 ± 0.85	1		pCi/L	11/11/2009 245 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	666	5		mg/L	10/26/2009 1751 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	24	5		mg/L	10/26/2009 1751 CK	SM 2320B
Chloride	1	1		mg/L	10/23/2009 1456 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	10/26/2009 1751 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.1	0.1		mg/L	10/28/2009 1538 SK	EPA 353.2
Sulfate	122	1		mg/L	10/23/2009 1456 KO	EPA 300.0
Cations						
Calcium	4	1		mg/L	10/23/2009 1553 MS	EPA 200.7
Magnesium	2	1		mg/L	10/23/2009 1553 MS	EPA 200.7
Potassium	4	1		mg/L	10/23/2009 1553 MS	EPA 200.7
Sodium	353	1		mg/L	10/23/2009 1553 MS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009

Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-004
Client Sample ID: TS WELL 01
COC: 131110

Work Order: S0910350
Collection Date: 10/22/2009 4:30:00 PM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.92	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Carbonate as CO ₃	0.81	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Chloride	0.02	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sulfate	2.53	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Calcium	0.18	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Magnesium	0.14	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Potassium	0.09	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sodium	15.33	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	15.75	0		meq/L	11/12/2009 1140 KO	SM 1030E
Anion Sum	14.32	0		meq/L	11/12/2009 1140 KO	SM 1030E
Cation-Anion Balance	4.74	0		%	11/12/2009 1140 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/23/2009 1553 MS	EPA 200.7
Arsenic	ND	0.005		mg/L	10/23/2009 1701 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/23/2009 1701 MS	EPA 200.8
Boron	0.3	0.1		mg/L	10/23/2009 1553 MS	EPA 200.7
Cadmium	ND	0.002		mg/L	10/23/2009 1701 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/23/2009 1553 MS	EPA 200.7
Copper	ND	0.01		mg/L	10/23/2009 1701 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/23/2009 1553 MS	EPA 200.7
Lead	ND	0.02		mg/L	10/23/2009 1701 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/27/2009 1009 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/23/2009 1701 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/23/2009 1553 MS	EPA 200.7
Selenium	ND	0.005		mg/L	10/23/2009 1701 MS	EPA 200.8
Uranium	0.004	0.001		mg/L	10/23/2009 1701 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/23/2009 1701 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/23/2009 1553 MS	EPA 200.7
Total Metals						
Iron	0.22	0.05		mg/L	10/29/2009 105 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/29/2009 105 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-003
Client Sample ID: TW WELL 02 (TW02)
COC: 131110

Work Order: S0910350
Collection Date: 10/21/2009 1:30:00 PM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.29			s.u.	10/21/2009 1330	Field
Conductivity	2780			µmhos/cm	10/21/2009 1330	Field
Turbidity	0.57			NTU	10/21/2009 1330	Field
Temperature	9.0			°C	10/21/2009 1330	Field
General Parameters						
pH	8.5	0.1		s.u.	10/26/2009 1728 CK	SM 4500 H B
Electrical Conductivity	2110	5		µmhos/cm	10/26/2009 1728 CK	SM 2510B
Total Dissolved Solids (180)	1450	10		mg/L	10/26/2009 1000 AMB	SM 2540
Solids, Total Dissolved (Calc)	1470	10		mg/L	11/12/2009 1140 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	654	5		mg/L	10/26/2009 1728 CK	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	10/30/2009 1232 SK	EPA 350.1
Gross Alpha	4.4 ± 2.3	2		pCi/L	11/09/2009 000 SH	SM 7110B
Gross Beta	11.7 ± 3.7	3.94		pCi/L	11/09/2009 000 SH	SM 7110B
Radium 226	0.31 ± 0.12	0.2		pCi/L	11/06/2009 2034 SH	SM 7500-Ra B
Total Radium 228	1.54 ± 0.87	1		pCi/L	11/11/2009 245 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	762	5		mg/L	10/26/2009 1728 CK	SM 2320B
Alkalinity, Carbonate as CO ₃	18	5		mg/L	10/26/2009 1728 CK	SM 2320B
Chloride	10	1		mg/L	10/23/2009 1447 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	10/26/2009 1728 CK	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/28/2009 1531 SK	EPA 353.2
Sulfate	481	1		mg/L	10/26/2009 1307 KO	EPA 300.0
Cations						
Calcium	19	1		mg/L	10/23/2009 1551 MS	EPA 200.7
Magnesium	8	1		mg/L	10/23/2009 1551 MS	EPA 200.7
Potassium	11	1		mg/L	10/23/2009 1551 MS	EPA 200.7
Sodium	544	1		mg/L	10/23/2009 1551 MS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 12/23/2009
Report ID: S0910350002
(Replaces S0910350001)

Project: Ross Project
Lab ID: S0910350-003
Client Sample ID: TW WELL 02 (TW02)
COC: 131110

Work Order: S0910350
Collection Date: 10/21/2009 1:30:00 PM
Date Received: 10/23/2009 10:15:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.49	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Carbonate as CO ₃	0.58	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Chloride	0.27	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sulfate	10.00	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Calcium	0.94	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Magnesium	0.66	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Potassium	0.28	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Sodium	23.66	0.01		meq/L	11/12/2009 1140 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	25.55	0		meq/L	11/12/2009 1140 KO	SM 1030E
Anion Sum	23.40	0		meq/L	11/12/2009 1140 KO	SM 1030E
Cation-Anion Balance	4.39	0		%	11/12/2009 1140 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/23/2009 1551 MS	EPA 200.7
Arsenic	ND	0.005		mg/L	10/23/2009 1657 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/23/2009 1657 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/23/2009 1551 MS	EPA 200.7
Cadmium	ND	0.002		mg/L	10/23/2009 1657 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/23/2009 1551 MS	EPA 200.7
Copper	ND	0.01		mg/L	10/23/2009 1657 MS	EPA 200.8
Iron	0.05	0.05		mg/L	10/23/2009 1551 MS	EPA 200.7
Lead	ND	0.02		mg/L	10/23/2009 1657 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/27/2009 1007 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/23/2009 1657 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/23/2009 1551 MS	EPA 200.7
Selenium	ND	0.005		mg/L	10/23/2009 1657 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/23/2009 1657 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/23/2009 1657 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	10/23/2009 1551 MS	EPA 200.7
Total Metals						
Iron	0.22	0.05		mg/L	10/29/2009 103 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	10/29/2009 103 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

December 2010

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- 559 -

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 19XX18 Date: 1-21-10 Time: 1500

Landowner

Name: Merit Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) —

Stock ☒ Industrial

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.74

Cond. 3.12 MS

Temp. °C 8.9°C

Turbidity (ntu) 2.10

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: 30°F

Comments: Sampled at 789V well house - Kelly
D. said 19XX18 well was down but water still
coming out of valve? Not sure if 19XX18 was working
or water was from 789V? water clear - no odor-
fizzy

* Collected radon sample (2 Glass vials) - 1-22-09
@ 1300

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 22X-19 Date: 1-21-10 Time: 1130

Landowner

Name: Merit Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr SE NW

SEC 19

TWN 53

RNG 67

Picture #(s) 1

Industrial

~~Stock~~ ☒

Domestic _____

SEO Permitted Facility Name: Burlington
Northern Inc

Permit No. P50917W

Location (Decimal Degrees)

Lat 44.56631

Long W 104.95694

Elev. 4286

Water Quality

pH 8.89

Cond. 2.72 mS

Temp. °C 10.4°C

Turbidity (ntu) 2.90

D.O. (mg/L) _____

Water Level (ft): _____ % Combustible Gas: _____

Casing Height (ft): _____ Ambient Air Temp: _____

Comments: Merit Energy water production well - Deeper
of the three according to Kelly D.

* Took Radon sample 1-22-10 @ 1315

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CSWELL 01 Date: 1-22-00 Time: 1015

Landowner

Name: Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) —

Stock ☒

Domestic ☒

SEO Permitted Facility Name: ~~P132537W~~
George/Coral Strong

Permit No. P132537W

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 8.44

Cond. 1635 μ S

Temp. °C 7.8°C

Turbidity (ntu) 0.27

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: 20°F Wind 20-30
mph

Comments: * Sampled for radon (2 glass vials)

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CSWELL03 Date: 1-22-10 Time: 0930

Landowner

Name: Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr NENE

SEC 30

TWN 53

RNG 67

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: Ray W. Robinson Permit No. P619W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

Temp. °C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): _____

*No
Access*

Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Could not get to this well due to
deep snow - No access. R.F.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: DW WELLOI Date: 1-22-10 Time: 1110

Landowner

Name: Wood

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) —

Stock _____

Domestic ☒

SEO Permitted Facility Name: —

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.45

Cond. 3.43 mS

Temp. °C 8.4

Turbidity (ntu) 7.04

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: 20°F Wind 30 mph

Comments: water slightly turbid, but clearer than
last quarter. - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HBWELL03 Date: 1-28-10 Time: 1230

Landowner

Name: Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr SW SW

SEC 5

TWN 53

RNG 67

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: Harry J. Berger Permit No. P7324P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.45

Cond. 1611

Temp. °C 8.3

Turbidity (ntu) 21.1

D.O. (mg/L) —

Water Level (ft): — % Combustible Gas: —

Casing Height (ft): — Ambient Air Temp: 10°F

Comments: Water slightly turbid - no odor - Berger's
installed new submersible pump in this well

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HBWELL04 Date: 1-29-10 Time: 1415

Landowner

Name: BERGER

Address _____

Phone# _____

Legal Location

Qtr/Qtr NE NW

SEC 8

TWN 53

RNG 67

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: Harry J. Berger Permit No. P7326P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.29

Cond. 1761

Temp. °C 6.6

Turbidity (ntu) 6.23

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 30°F

Comments: Water clear - no odor - took radon
sample

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HBWELL05 Date: 1-29-10 Time: 1500

Landowner

Name: Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: Dell B. Evans

Permit No. 97430P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.57

Cond. 1539

Temp. °C 8.5

Turbidity (ntu) 141

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 30°F - 0 wind

Comments: Water turbide - rust color - ran for 15 min.
but did not clear up - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HBWELLO6 Date: 3/23/10 Time: 1245

Landowner

Name: BERGER

Address _____

Phone# _____

Legal Location

Qtr/Qtr NNNW

SEC 22

TWN 53

RNG 67

Picture #(s) 1

Stock ✓

Domestic ✓

SEO Permitted Facility Name: _____

Permit No. ? P7318P
P7320P

Location (Decimal Degrees)

Lat 44.56927

Long 104.90194

Elev. 4212

Water Quality

pH 8.80

Cond. 1450 μ S

Temp. °C 8.9°C

Turbidity (ntu) 1.20 NTU

D.O. (mg/L) _____

Water Level (ft): No Access

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 40°F

Comments: Berger residents (Gene and Harry) and stock.
Water has black flakes in it. Water smells
bad - sulfur smell. Gene said well has been there
over 20 years and has never been bad. Gene
said he first noticed water being bad on Sunday
morning 3-21-10. Gene thinks it might be an abandoned
oil well S.E. of these residence. Water fizzy.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P31770 W Date: 1-22-10 Time: 0915

Landowner

Name: Westaver

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) —

Stock _____

Domestic ☒

SEO Permitted Facility Name: —

Permit No. _____

Location (Decimal Degrees)

Lat —

Long —

Elev. —

Water Quality

pH 7.80

Cond. 3.62 μ S

Temp. °C 8.2

Turbidity (ntu) 0.56

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: _____

Comments: Combined water from P31770W & P38245
* Sampled for radon (2Vials)

* water froze - could not sample

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P42868W Date: 1-23-10 Time: 1230

Landowner

Name: Hahn

Address _____

Phone# _____

Legal Location

Qtr/Qtr NESW

SEC 14

TWN 53

RNG 68

Picture #(s) —

Stock ☒

Domestic ☒

SEO Permitted Facility Name: James and Bessie
Hahn

Permit No. P42868W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

well
froze

u) _____

Water Level (ft): —

Gas: —

Casing Height (ft): —

Ambient Air Temp: 20°F Wind 15-20

Comments: Turned water on for 10 minutes and well ran
out of water - let recharge. Water pipes in well
house froze - Contacted Hahn's - left
message that well is froze 1-23-10 @
1500

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW01 Date: 1-23-10 Time: 1330

Landowner

Name: T.J. Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) _____

Stock _____

Domestic ☒

SEO Permitted Facility Name: John and Rondi
yard

Permit No. P74302W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.19

Cond. 2.68 MS

Temp. °C 7.5

Turbidity (ntu) 0.19

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear-no odor - Wesley house well

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW02 Date: 1-23-10 Time: 1400

Landowner

Name: Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr SW SW

SEC 8

TWN 53

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: Yesta Larissa
Wesley

Permit No. P103666W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.10

Cond. 2.89 MS

Temp. °C 5.5

Turbidity (ntu) 0.56

D.O. (mg/L) _____

Water Level (ft): _____ % Combustible Gas: _____

Casing Height (ft): _____ Ambient Air Temp: _____

Comments: Oshola field office house well and
stock well.



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/17/2010
Report ID: S1001308002
(Replaces S1001308001)

Project: ROSS
Lab ID: S1001308-002
Client Sample ID: 19XX18
COC: 128061

Work Order: S1001308
Collection Date: 1/21/2010 3:00:00 PM
Date Received: 1/22/2010 8:11:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.74			s.u.	01/21/2010 1500	Field
Conductivity	3120			µmhos/cm	01/21/2010 1500	Field
Turbidity	2.10			NTU	01/21/2010 1500	Field
Temperature	8.9			°C	01/21/2010 1500	Field
General Parameters						
pH	8.6	0.1		s.u.	01/26/2010 1515 KO	SM 4500 H B
Electrical Conductivity	2320	5		µmhos/cm	01/26/2010 1515 KO	SM 2510B
Total Dissolved Solids (180)	1690	10		mg/L	01/26/2010 1405 AMB	SM 2540
Solids, Total Dissolved (Calc)	1550	10		mg/L	01/29/2010 934 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	555	5		mg/L	01/26/2010 1515 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	02/03/2010 1553 SK	EPA 350.1
Gross Alpha	252 ± 17	2.8		pCi/L	01/28/2010 000 SH	SM 7110B
Gross Beta	75 ± 11	10.2		pCi/L	01/28/2010 000 SH	SM 7110B
Radium 226	37.30 ± 0.90	0.2		pCi/L	02/04/2010 1917 SH	SM 7500-Ra B
Total Radium 228	1.35 ± 0.83	1		pCi/L	02/06/2010 205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	639	5		mg/L	01/26/2010 1515 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	19	5		mg/L	01/26/2010 1515 KO	SM 2320B
Chloride	6	1		mg/L	01/26/2010 1421 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	01/26/2010 1515 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.1	0.1		mg/L	01/28/2010 1118 SK	EPA 353.2
Sulfate	616	1		mg/L	01/26/2010 1421 KO	EPA 300.0
Cations						
Calcium	8	1		mg/L	01/26/2010 1953 DG	EPA 200.7
Magnesium	3	1		mg/L	01/26/2010 1953 DG	EPA 200.7
Potassium	4	1		mg/L	01/26/2010 1953 DG	EPA 200.7
Sodium	580	1		mg/L	01/26/2010 1953 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/17/2010
Report ID: S1001308002
(Replaces S1001308001)

Project: ROSS
Lab ID: S1001308-002
Client Sample ID: 19XX18
COC: 128061

Work Order: S1001308
Collection Date: 1/21/2010 3:00:00 PM
Date Received: 1/22/2010 8:11:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.48	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Carbonate as CO ₃	0.62	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Chloride	0.16	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Sulfate	12.83	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Calcium	0.39	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Magnesium	0.21	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Potassium	0.10	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Sodium	25.22	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	25.93	0		meq/L	01/29/2010 934 KO	SM 1030E
Anion Sum	24.14	0		meq/L	01/29/2010 934 KO	SM 1030E
Cation-Anion Balance	3.57	0		%	01/29/2010 934 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/26/2010 1953 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/26/2010 1228 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/26/2010 1228 MS	EPA 200.8
Boron	0.5	0.1		mg/L	01/26/2010 1953 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/26/2010 1228 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/26/2010 1953 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/26/2010 1228 MS	EPA 200.8
Iron	ND	0.05		mg/L	01/26/2010 1953 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/26/2010 1228 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 936 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/26/2010 1228 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/26/2010 1953 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/26/2010 1228 MS	EPA 200.8
Uranium	0.074	0.001		mg/L	01/26/2010 1228 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/26/2010 1228 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/26/2010 1953 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	01/27/2010 1630 DG	EPA 200.7
Manganese	ND	0.02		mg/L	01/27/2010 1630 DG	EPA 200.7

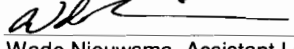
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 4 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/17/2010
Report ID: S1001308002
(Replaces S1001308001)

Project: ROSS
Lab ID: S1001308-001
Client Sample ID: 22X-19
COC: 128061

Work Order: S1001308
Collection Date: 1/21/2010 11:30:00 AM
Date Received: 1/22/2010 8:11:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.89			s.u.	01/21/2010 1130	Field
Conductivity	2720			µmhos/cm	01/21/2010 1130	Field
Turbidity	2.90			NTU	01/21/2010 1130	Field
Temperature	10.4			°C	01/21/2010 1130	Field
General Parameters						
pH	8.6	0.1		s.u.	01/26/2010 1503 KO	SM 4500 H B
Electrical Conductivity	2030	5		µmhos/cm	01/26/2010 1503 KO	SM 2510B
Total Dissolved Solids (180)	1460	10		mg/L	01/26/2010 1400 AMB	SM 2540
Solids, Total Dissolved (Calc)	1270	10		mg/L	01/29/2010 934 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	467	5		mg/L	01/26/2010 1503 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	02/03/2010 1552 SK	EPA 350.1
Gross Alpha	46.3 ± 5.2	2		pCi/L	01/28/2010 000 SH	SM 7110B
Gross Beta	7.3 ± 3.6	3.96		pCi/L	01/28/2010 000 SH	SM 7110B
Radium 226	3.38 ± 0.27	0.2		pCi/L	02/04/2010 1917 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/06/2010 205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	528	5		mg/L	01/26/2010 1503 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	21	5		mg/L	01/26/2010 1503 KO	SM 2320B
Chloride	10	1		mg/L	01/26/2010 1408 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	01/26/2010 1503 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/28/2010 1117 SK	EPA 353.2
Sulfate	520	1		mg/L	01/26/2010 1408 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	01/28/2010 1721 DG	EPA 200.7
Magnesium	2	1		mg/L	01/28/2010 1721 DG	EPA 200.7
Potassium	4	1		mg/L	01/28/2010 1721 DG	EPA 200.7
Sodium	444	1		mg/L	01/28/2010 1721 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/17/2010

Report ID: S1001308002
(Replaces S1001308001)

Project: ROSS
Lab ID: S1001308-001
Client Sample ID: 22X-19
COC: 128061

Work Order: S1001308
Collection Date: 1/21/2010 11:30:00 AM
Date Received: 1/22/2010 8:11:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.65	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Carbonate as CO ₃	0.68	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Chloride	0.28	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Sulfate	10.82	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Calcium	0.29	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Magnesium	0.14	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Potassium	0.10	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Sodium	19.31	0.01		meq/L	01/29/2010 934 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.86	0		meq/L	01/29/2010 934 KO	SM 1030E
Anion Sum	20.48	0		meq/L	01/29/2010 934 KO	SM 1030E
Cation-Anion Balance	1.54	0		%	01/29/2010 934 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/26/2010 1944 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/26/2010 1225 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/26/2010 1225 MS	EPA 200.8
Boron	0.4	0.1		mg/L	01/26/2010 1944 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/26/2010 1225 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/26/2010 1944 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/26/2010 1225 MS	EPA 200.8
Iron	0.06	0.05		mg/L	01/26/2010 1944 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/26/2010 1225 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 934 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/26/2010 1225 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/26/2010 1944 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/26/2010 1225 MS	EPA 200.8
Uranium	0.020	0.001		mg/L	01/26/2010 1225 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/26/2010 1225 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/26/2010 1944 DG	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	01/27/2010 1627 DG	EPA 200.7
Manganese	ND	0.02		mg/L	01/27/2010 1627 DG	EPA 200.7

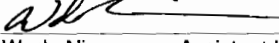
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 2 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010

Report ID: S1001282003
(Replaces S1001282002)

Project: ROSS
Lab ID: S1001282-002
Client Sample ID: CSWELL01
COC: 131139

Work Order: S1001282
Collection Date: 1/22/2010 10:15:00 AM
Date Received: 1/22/2010 4:01:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.44			s.u.	01/22/2010 1015	Field
Conductivity	1635			µmhos/cm	01/22/2010 1015	Field
Turbidity	0.27			NTU	01/22/2010 1015	Field
Temperature	7.8			°C	01/22/2010 1015	Field
General Parameters						
pH	8.4	0.1		s.u.	01/26/2010 1536 KO	SM 4500 H B
Electrical Conductivity	1550	5		µmhos/cm	01/26/2010 1536 KO	SM 2510B
Total Dissolved Solids (180)	1030	10		mg/L	01/26/2010 1145 AMB	SM 2540
Solids, Total Dissolved (Calc)	1020	10		mg/L	02/01/2010 1208 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	633	5		mg/L	01/26/2010 1536 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1542 SK	EPA 350.1
Gross Alpha	7.2 ± 2.7	2		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	ND	3.96		pCi/L	01/28/2010 737 SH	SM 7110B
Radon-222	1600±95	29	L	pCi/L	01/25/2010 1543 WN	SM7500-RN
Radium 226	0.38 ± 0.10	0.2		pCi/L	02/04/2010 1645 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/05/2010 2051 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	748	5		mg/L	01/26/2010 1536 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	12	5		mg/L	01/26/2010 1536 KO	SM 2320B
Chloride	2	1		mg/L	01/26/2010 1315 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	01/26/2010 1536 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/28/2010 1107 SK	EPA 353.2
Sulfate	224	1		mg/L	01/26/2010 1315 KO	EPA 300.0
Cations						
Calcium	9	1		mg/L	01/26/2010 1935 DG	EPA 200.7
Magnesium	6	1		mg/L	01/26/2010 1935 DG	EPA 200.7
Potassium	8	1		mg/L	01/26/2010 1935 DG	EPA 200.7
Sodium	393	1		mg/L	01/26/2010 1935 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010
Report ID: S1001282003
(Replaces S1001282002)

Project: ROSS
Lab ID: S1001282-002
Client Sample ID: CSWELL01
COC: 131139

Work Order: S1001282
Collection Date: 1/22/2010 10:15:00 AM
Date Received: 1/22/2010 4:01:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.26	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Carbonate as CO ₃	0.38	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Chloride	0.06	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Sulfate	4.66	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Calcium	0.46	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Magnesium	0.51	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Potassium	0.19	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Sodium	17.11	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.28	0		meq/L	02/01/2010 1208 KO	SM 1030E
Anion Sum	17.40	0		meq/L	02/01/2010 1208 KO	SM 1030E
Cation-Anion Balance	2.47	0		%	02/01/2010 1208 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/26/2010 1935 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/26/2010 1156 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/26/2010 1156 MS	EPA 200.8
Boron	0.3	0.1		mg/L	01/26/2010 1935 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/26/2010 1156 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/26/2010 1935 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/26/2010 1156 MS	EPA 200.8
Iron	ND	0.05		mg/L	01/26/2010 1935 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/26/2010 1156 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 917 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/26/2010 1156 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/26/2010 1935 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/26/2010 1156 MS	EPA 200.8
Uranium	0.004	0.001		mg/L	01/26/2010 1156 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/26/2010 1156 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/26/2010 1935 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	01/27/2010 1614 DG	EPA 200.7
Manganese	ND	0.02		mg/L	01/27/2010 1614 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010

Report ID: S1001282003
(Replaces S1001282002)

Project: ROSS
Lab ID: S1001282-005
Client Sample ID: DWWELL01
COC: 131139

Work Order: S1001282
Collection Date: 1/22/2010 11:10:00 AM
Date Received: 1/22/2010 4:01:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.45			s.u.	01/22/2010 1110	Field
Conductivity	3430			µmhos/cm	01/22/2010 1110	Field
Turbidity	7.04			NTU	01/22/2010 1110	Field
Temperature	8.4			°C	01/22/2010 1110	Field
General Parameters						
pH	8.4	0.1		s.u.	01/26/2010 1548 KO	SM 4500 H B
Electrical Conductivity	2500	5		µmhos/cm	01/26/2010 1548 KO	SM 2510B
Total Dissolved Solids (180)	1820	10		mg/L	01/26/2010 1155 AMB	SM 2540
Solids, Total Dissolved (Calc)	1700	10		mg/L	02/01/2010 1208 KO	SM 1030E
Alkalinity, Total (As CaCO3)	597	5		mg/L	01/26/2010 1548 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	02/03/2010 1543 SK	EPA 350.1
Gross Alpha	14.9 ± 5.9	2.8		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	ND	10.2		pCi/L	01/28/2010 737 SH	SM 7110B
Radium 226	0.30 ± 0.09	0.2		pCi/L	02/04/2010 1645 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/05/2010 2051 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO3	710	5		mg/L	01/26/2010 1548 KO	SM 2320B
Alkalinity, Carbonate as CO3	9	5		mg/L	01/26/2010 1548 KO	SM 2320B
Chloride	7	1		mg/L	01/26/2010 1328 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	01/26/2010 1548 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/28/2010 1114 SK	EPA 353.2
Sulfate	689	1		mg/L	01/26/2010 1328 KO	EPA 300.0
Cations						
Calcium	16	1		mg/L	01/26/2010 1937 DG	EPA 200.7
Magnesium	6	1		mg/L	01/26/2010 1937 DG	EPA 200.7
Potassium	12	1		mg/L	01/26/2010 1937 DG	EPA 200.7
Sodium	610	1		mg/L	01/26/2010 1937 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010

Report ID: S1001282003
(Replaces S1001282002)

Project: ROSS
Lab ID: S1001282-005
Client Sample ID: DWWELL01
COC: 131139

Work Order: S1001282
Collection Date: 1/22/2010 11:10:00 AM
Date Received: 1/22/2010 4:01:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.63	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Carbonate as CO ₃	0.30	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Chloride	0.19	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Sulfate	14.33	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Calcium	0.81	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Magnesium	0.50	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Potassium	0.30	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Sodium	26.53	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	28.15	0		meq/L	02/01/2010 1208 KO	SM 1030E
Anion Sum	26.51	0		meq/L	02/01/2010 1208 KO	SM 1030E
Cation-Anion Balance	3.01	0		%	02/01/2010 1208 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/26/2010 1937 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/26/2010 1207 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/26/2010 1207 MS	EPA 200.8
Boron	0.5	0.1		mg/L	01/26/2010 1937 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/26/2010 1207 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/26/2010 1937 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/26/2010 1207 MS	EPA 200.8
Iron	0.58	0.05		mg/L	01/26/2010 1937 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/26/2010 1207 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 919 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/26/2010 1207 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/26/2010 1937 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/26/2010 1207 MS	EPA 200.8
Uranium	ND	0.001		mg/L	01/26/2010 1207 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/26/2010 1207 MS	EPA 200.8
Zinc	ND	0.01		mg/L	01/26/2010 1937 DG	EPA 200.7
Total Metals						
Iron	1.84	0.05		mg/L	01/27/2010 1616 DG	EPA 200.7
Manganese	0.04	0.02		mg/L	01/27/2010 1616 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002035001

Project: ROSS ISR
Lab ID: S1002035-001
Client Sample ID: HBWELL 03
COC: 131200

Work Order: S1002035
Collection Date: 1/28/2010 12:30:00 PM
Date Received: 1/29/2010 7:49:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.45			s.u.	01/28/2010 1230	Field
Conductivity	1611			µmhos/cm	01/28/2010 1230	Field
Turbidity	21.1			NTU	01/28/2010 1230	Field
Temperature	8.3			°C	01/28/2010 1230	Field
General Parameters						
pH	8.0	0.1		s.u.	02/03/2010 1615 KO	SM 4500 H B
Electrical Conductivity	1520	5		µmhos/cm	02/03/2010 1615 KO	SM 2510B
Total Dissolved Solids (180)	1140	10		mg/L	02/02/2010 1615 AMB	SM 2540
Solids, Total Dissolved (Calc)	1030	10		mg/L	02/05/2010 818 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	460	5		mg/L	02/03/2010 1615 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1704 SK	EPA 350.1
Gross Alpha	7.0 ± 1.8	2		pCi/L	02/09/2010 1148 SH	SM 7110B
Gross Beta	11.2 ± 2.1	3		pCi/L	02/09/2010 1148 SH	SM 7110B
Radium 226	0.85 ± 0.12	0.2		pCi/L	02/16/2010 1628 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/18/2010 023 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	561	5		mg/L	02/03/2010 1615 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	02/03/2010 1615 KO	SM 2320B
Chloride	9	1		mg/L	02/03/2010 1120 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	02/03/2010 1615 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	02/10/2010 1505 SK	EPA 353.2
Sulfate	402	1		mg/L	02/03/2010 1120 KO	EPA 300.0
Cations						
Calcium	95	1		mg/L	02/02/2010 2142 DG	EPA 200.7
Magnesium	55	1		mg/L	02/02/2010 2142 DG	EPA 200.7
Potassium	14	1		mg/L	02/02/2010 2142 DG	EPA 200.7
Sodium	178	1		mg/L	02/02/2010 2142 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

Page 1 of 2



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/18/2010
Report ID: S1002035001

Project: ROSS ISR
Lab ID: S1002035-001
Client Sample ID: HBWELL 03
COC: 131200

Work Order: S1002035
Collection Date: 1/28/2010 12:30:00 PM
Date Received: 1/29/2010 7:49:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.20	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Chloride	0.25	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Sulfate	8.36	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Calcium	4.73	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Magnesium	4.49	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Potassium	0.34	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Sodium	7.74	0.01		meq/L	02/05/2010 818 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.32	0		meq/L	02/05/2010 818 KO	SM 1030E
Anion Sum	17.83	0		meq/L	02/05/2010 818 KO	SM 1030E
Cation-Anion Balance	1.44	0		%	02/05/2010 818 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	02/02/2010 2142 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	02/02/2010 1443 MS	EPA 200.8
Barium	ND	0.5		mg/L	02/02/2010 1443 MS	EPA 200.8
Boron	0.1	0.1		mg/L	02/02/2010 2142 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	02/02/2010 1443 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/02/2010 2142 DG	EPA 200.7
Copper	ND	0.01		mg/L	02/02/2010 1443 MS	EPA 200.8
Iron	2.25	0.05		mg/L	02/02/2010 2142 DG	EPA 200.7
Lead	ND	0.02		mg/L	02/02/2010 1443 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/05/2010 1120 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	02/02/2010 1443 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/02/2010 2142 DG	EPA 200.7
Selenium	ND	0.005		mg/L	02/02/2010 1443 MS	EPA 200.8
Uranium	0.005	0.001		mg/L	02/02/2010 1443 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	02/02/2010 1443 MS	EPA 200.8
Zinc	ND	0.01		mg/L	02/02/2010 2142 DG	EPA 200.7
Total Metals						
Iron	4.76	0.05		mg/L	02/03/2010 1901 DG	EPA 200.7
Manganese	0.25	0.02		mg/L	02/03/2010 1901 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010
Report ID: S1002001002
(Replaces S1002001001)

Project: ROSS ISR
Lab ID: S1002001-001
Client Sample ID: HBWELL04
COC: 131147

Work Order: S1002001
Collection Date: 1/29/2010 2:15:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.29			s.u.	01/29/2010 1415	Field
Conductivity	1761			µmhos/cm	01/29/2010 1415	Field
Turbidity	6.23			NTU	01/29/2010 1415	Field
Temperature	6.6			°C	01/29/2010 1415	Field
General Parameters						
pH	7.9	0.1		s.u.	02/01/2010 1748 KO	SM 4500 H B
Electrical Conductivity	1620	5		µmhos/cm	02/01/2010 1748 KO	SM 2510B
Total Dissolved Solids (180)	1380	10		mg/L	02/01/2010 1335 AMB	SM 2540
Solids, Total Dissolved (Calc)	1350	10		mg/L	02/11/2010 832 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	444	5		mg/L	02/05/2010 1323 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1711 SK	EPA 350.1
Gross Alpha	15.2 ± 3.6	2		pCi/L	02/08/2010 1920 SH	SM 7110B
Gross Beta	9.1 ± 2.7	3		pCi/L	02/08/2010 1920 SH	SM 7110B
Radon-222	1600±98	31	L	pCi/L	02/03/2010 012 WN	SM7500-RN
Radium 226	0.31 ± 0.08	0.2		pCi/L	02/16/2010 1409 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/17/2010 2008 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	542	5		mg/L	02/05/2010 1323 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	02/05/2010 1323 KO	SM 2320B
Chloride	12	1		mg/L	02/10/2010 1017 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	02/01/2010 1748 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.2	0.1		mg/L	02/10/2010 1506 SK	EPA 353.2
Sulfate	654	1		mg/L	02/10/2010 1017 KO	EPA 300.0
Cations						
Calcium	203	1		mg/L	02/01/2010 2234 DG	EPA 200.7
Magnesium	62	1		mg/L	02/01/2010 2234 DG	EPA 200.7
Potassium	7	1		mg/L	02/04/2010 1814 DG	EPA 200.7
Sodium	141	1		mg/L	02/01/2010 2234 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: _____
Glenn Dorsch, Chief Cook and Bottle Washer

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010

Report ID: S1002001002
(Replaces S1002001001)

Project: ROSS ISR
Lab ID: S1002001-001
Client Sample ID: HBWELL04
COC: 131147

Work Order: S1002001
Collection Date: 1/29/2010 2:15:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.87	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Chloride	0.34	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Fluoride	ND	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Nitrate + Nitrite as N	0.08	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Sulfate	13.60	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Calcium	10.14	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Magnesium	5.10	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Potassium	0.18	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Sodium	6.12	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.56	0		meq/L	02/11/2010 832 KO	SM 1030E
Anion Sum	22.92	0		meq/L	02/11/2010 832 KO	SM 1030E
Cation-Anion Balance	3.06	0		%	02/11/2010 832 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	02/01/2010 2234 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	02/01/2010 1317 MS	EPA 200.8
Barium	ND	0.5		mg/L	02/01/2010 1317 MS	EPA 200.8
Boron	ND	0.1		mg/L	02/01/2010 2234 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	02/01/2010 1317 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/01/2010 2234 DG	EPA 200.7
Copper	ND	0.01		mg/L	02/01/2010 1317 MS	EPA 200.8
Iron	ND	0.05		mg/L	02/01/2010 2234 DG	EPA 200.7
Lead	ND	0.02		mg/L	02/01/2010 1317 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 1253 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	02/01/2010 1317 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/01/2010 2234 DG	EPA 200.7
Selenium	ND	0.005		mg/L	02/01/2010 1317 MS	EPA 200.8
Uranium	0.033	0.001		mg/L	02/01/2010 1317 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	02/01/2010 1317 MS	EPA 200.8
Zinc	0.05	0.01		mg/L	02/01/2010 2234 DG	EPA 200.7
Total Metals						
Iron	0.92	0.05		mg/L	02/02/2010 2320 DG	EPA 200.7
Manganese	0.08	0.02		mg/L	02/02/2010 2320 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: _____
Glenn Dorsch, Chief Cook and Bottle Washer

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010
Report ID: S1002001002
(Replaces S1002001001)

Project: ROSS ISR
Lab ID: S1002001-002
Client Sample ID: HBWELL05
COC: 131147

Work Order: S1002001
Collection Date: 1/29/2010 3:00:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.57			s.u.	01/29/2010 1500	Field
Conductivity	1539			µmhos/cm	01/29/2010 1500	Field
Turbidity	141			NTU	01/29/2010 1500	Field
Temperature	8.5			°C	01/29/2010 1500	Field
General Parameters						
pH	8.0	0.1		s.u.	02/01/2010 1816 KO	SM 4500 H B
Electrical Conductivity	1520	5		µmhos/cm	02/01/2010 1816 KO	SM 2510B
Total Dissolved Solids (180)	1090	10		mg/L	02/01/2010 1340 AMB	SM 2540
Solids, Total Dissolved (Calc)	1030	10		mg/L	02/11/2010 832 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	519	5		mg/L	02/01/2010 1816 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1712 SK	EPA 350.1
Gross Alpha	11.8 ± 3.2	2		pCi/L	02/09/2010 1800 SH	SM 7110B
Gross Beta	10.0 ± 2.5	3		pCi/L	02/09/2010 1800 SH	SM 7110B
Radium 226	ND	0.2		pCi/L	02/16/2010 1628 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/18/2010 023 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	633	5		mg/L	02/01/2010 1816 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	02/01/2010 1816 KO	SM 2320B
Chloride	4	1		mg/L	02/01/2010 1858 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	02/01/2010 1816 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	02/10/2010 1507 SK	EPA 353.2
Sulfate	355	1		mg/L	02/01/2010 1858 KO	EPA 300.0
Cations						
Calcium	87	1		mg/L	02/01/2010 2236 DG	EPA 200.7
Magnesium	34	1		mg/L	02/01/2010 2236 DG	EPA 200.7
Potassium	8	1		mg/L	02/01/2010 2236 DG	EPA 200.7
Sodium	232	1		mg/L	02/01/2010 2236 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: _____
Glenn Dorsch, Chief Cook and Bottle Washer

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010

Report ID: S1002001002
(Replaces S1002001001)

Project: ROSS ISR
Lab ID: S1002001-002
Client Sample ID: HBWELL05
COC: 131147

Work Order: S1002001
Collection Date: 1/29/2010 3:00:00 PM
Date Received: 2/1/2010 8:16:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.38	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Chloride	0.10	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Sulfate	7.38	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Calcium	4.32	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Magnesium	2.76	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Potassium	0.20	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Sodium	10.10	0.01		meq/L	02/11/2010 832 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.40	0		meq/L	02/11/2010 832 KO	SM 1030E
Anion Sum	17.89	0		meq/L	02/11/2010 832 KO	SM 1030E
Cation-Anion Balance	1.38	0		%	02/11/2010 832 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	02/01/2010 2236 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	02/01/2010 1327 MS	EPA 200.8
Barium	ND	0.5		mg/L	02/01/2010 1327 MS	EPA 200.8
Boron	0.2	0.1		mg/L	02/01/2010 2236 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	02/01/2010 1327 MS	EPA 200.8
Chromium	ND	0.01		mg/L	02/01/2010 2236 DG	EPA 200.7
Copper	ND	0.01		mg/L	02/01/2010 1327 MS	EPA 200.8
Iron	1.55	0.05		mg/L	02/01/2010 2236 DG	EPA 200.7
Lead	ND	0.02		mg/L	02/01/2010 1327 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 1255 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	02/01/2010 1327 MS	EPA 200.8
Nickel	ND	0.01		mg/L	02/01/2010 2236 DG	EPA 200.7
Selenium	0.005	0.005		mg/L	02/01/2010 1327 MS	EPA 200.8
Uranium	0.011	0.001		mg/L	02/01/2010 1327 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	02/01/2010 1327 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	02/01/2010 2236 DG	EPA 200.7
Total Metals						
Iron	17.0	0.05		mg/L	02/02/2010 2331 DG	EPA 200.7
Manganese	0.12	0.02		mg/L	02/02/2010 2331 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: _____
Glenn Dorsch, Chief Cook and Bottle Washer

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003367001

Project: ROSS Project
Lab ID: S1003367-001
Client Sample ID: HBWELL06
COC: 131141

Work Order: S1003367
Collection Date: 3/23/2010 12:45:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.80			s.u.	03/23/2010 1245	Field
Conductivity	1450			µmhos/cm	03/23/2010 1245	Field
Turbidity	1.20			NTU	03/23/2010 1245	Field
Temperature	8.9			°C	03/23/2010 1245	Field
General Parameters						
pH	8.5	0.1		s.u.	03/25/2010 1533 KO	SM 4500 H B
Electrical Conductivity	1410	5		µmhos/cm	03/25/2010 1533 KO	SM 2510B
Total Dissolved Solids (180)	960	10		mg/L	03/26/2010 1630 AMB	SM 2540
Solids, Total Dissolved (Calc)	940	10		mg/L	03/30/2010 1207 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	768	5		mg/L	03/25/2010 1533 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	04/05/2010 1508 SK	EPA 350.1
Oil & Grease, N-Hexane Extractable	ND	5		mg/L	03/30/2010 000 LJK	EPA 1664A
Gross Alpha	ND	2		pCi/L	03/31/2010 000 SH	SM 7110B
Gross Beta	3.6 ± 2.0	3		pCi/L	03/31/2010 000 SH	SM 7110B
Radium 226	0.27 ± 0.10	0.2		pCi/L	04/08/2010 1210 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/09/2010 215 SH	Ra-05
Total Petroleum Hydrocarbons (SGT-HEM)	ND	5		mg/L	03/30/2010 000 LJK	EPA 1664A
Anions						
Alkalinity, Bicarbonate as HCO ₃	886	5		mg/L	03/25/2010 1533 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	25	5		mg/L	03/25/2010 1533 KO	SM 2320B
Chloride	46	1		mg/L	03/26/2010 2228 KO	EPA 300.0
Fluoride	2.5	0.1		mg/L	03/25/2010 1533 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	03/27/2010 1432 SK	EPA 353.2
Sulfate	25	1		mg/L	03/26/2010 2228 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	03/25/2010 2021 DG	EPA 200.7
Magnesium	2	1		mg/L	03/25/2010 2021 DG	EPA 200.7
Potassium	3	1		mg/L	03/25/2010 2021 DG	EPA 200.7
Sodium	397	1		mg/L	03/25/2010 2021 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 4/9/2010
Report ID: S1003367001

Project: ROSS Project
Lab ID: S1003367-001
Client Sample ID: HBWELL06
COC: 131141

Work Order: S1003367
Collection Date: 3/23/2010 12:45:00 PM
Date Received: 3/24/2010 4:20:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	14.52	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Carbonate as CO ₃	0.84	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Chloride	1.30	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Fluoride	0.13	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Sulfate	0.51	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Calcium	0.15	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Magnesium	0.13	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Potassium	0.07	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Sodium	17.26	0.01		meq/L	03/30/2010 1207 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.63	0		meq/L	03/30/2010 1207 KO	SM 1030E
Anion Sum	17.32	0		meq/L	03/30/2010 1207 KO	SM 1030E
Cation-Anion Balance	0.88	0		%	03/30/2010 1207 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	03/25/2010 2021 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	03/25/2010 1537 MS	EPA 200.8
Barium	ND	0.5		mg/L	03/25/2010 1537 MS	EPA 200.8
Boron	0.5	0.1		mg/L	03/25/2010 2021 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	03/25/2010 1537 MS	EPA 200.8
Chromium	ND	0.01		mg/L	03/25/2010 2021 DG	EPA 200.7
Copper	ND	0.01		mg/L	03/25/2010 1537 MS	EPA 200.8
Iron	ND	0.05		mg/L	03/25/2010 2021 DG	EPA 200.7
Lead	ND	0.02		mg/L	03/25/2010 1537 MS	EPA 200.8
Mercury	ND	0.001		mg/L	03/30/2010 1009 DJ	EPA 245.1
Molybdenum	ND	0.02		mg/L	03/25/2010 1537 MS	EPA 200.8
Nickel	ND	0.01		mg/L	03/25/2010 2021 DG	EPA 200.7
Selenium	ND	0.005		mg/L	03/25/2010 1537 MS	EPA 200.8
Uranium	ND	0.001		mg/L	03/25/2010 1537 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	03/25/2010 1537 MS	EPA 200.8
Zinc	ND	0.01		mg/L	03/25/2010 2021 DG	EPA 200.7
Total Metals						
Iron	0.10	0.05		mg/L	03/26/2010 1628 DG	EPA 200.7
Manganese	0.08	0.02		mg/L	03/26/2010 1628 DG	EPA 200.7

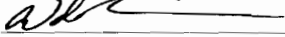
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010
Report ID: S1001282003
(Replaces S1001282002)

Project: ROSS
Lab ID: S1001282-001
Client Sample ID: P3177OW
COC: 131139

Work Order: S1001282
Collection Date: 1/22/2010 9:15:00 AM
Date Received: 1/22/2010 4:01:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.80			s.u.	01/22/2010 915	Field
Conductivity	3620			µmhos/cm	01/22/2010 915	Field
Turbidity	0.56			NTU	01/22/2010 915	Field
Temperature	8.2			°C	01/22/2010 915	Field
General Parameters						
pH	8.2	0.1		s.u.	01/26/2010 1525 KO	SM 4500 H B
Electrical Conductivity	2550	5		µmhos/cm	01/26/2010 1525 KO	SM 2510B
Total Dissolved Solids (180)	1890	10		mg/L	01/26/2010 1140 AMB	SM 2540
Solids, Total Dissolved (Calc)	1880	10		mg/L	02/01/2010 1208 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	499	5		mg/L	01/26/2010 1525 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1540 SK	EPA 350.1
Gross Alpha	35.8 ± 7.5	2.7		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	14.4 ± 8.9	9.76		pCi/L	01/28/2010 737 SH	SM 7110B
Radon-222	390±55	27	L	pCi/L	01/25/2010 1543 WN	SM7500-RN
Radium 226	0.43 ± 0.10	0.2		pCi/L	02/04/2010 1645 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/05/2010 2051 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	609	5		mg/L	01/26/2010 1525 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	01/26/2010 1525 KO	SM 2320B
Chloride	23	1		mg/L	01/26/2010 1302 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	01/26/2010 1525 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.1	0.1		mg/L	01/28/2010 1106 SK	EPA 353.2
Sulfate	865	1		mg/L	01/26/2010 1302 KO	EPA 300.0
Cations						
Calcium	74	1		mg/L	01/26/2010 1932 DG	EPA 200.7
Magnesium	37	1		mg/L	01/26/2010 1932 DG	EPA 200.7
Potassium	11	1		mg/L	01/26/2010 1932 DG	EPA 200.7
Sodium	565	1		mg/L	01/26/2010 1932 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/22/2010

Report ID: S1001282003
(Replaces S1001282002)

Project: ROSS
Lab ID: S1001282-001
Client Sample ID: P3177OW
COC: 131139

Work Order: S1001282
Collection Date: 1/22/2010 9:15:00 AM
Date Received: 1/22/2010 4:01:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.97	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Chloride	0.63	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Nitrate + Nitrite as N	0.07	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Sulfate	18.00	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Calcium	3.71	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Magnesium	3.05	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Potassium	0.28	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Sodium	24.58	0.01		meq/L	02/01/2010 1208 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	31.63	0		meq/L	02/01/2010 1208 KO	SM 1030E
Anion Sum	28.71	0		meq/L	02/01/2010 1208 KO	SM 1030E
Cation-Anion Balance	4.83	0		%	02/01/2010 1208 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/26/2010 1932 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/26/2010 1152 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/26/2010 1152 MS	EPA 200.8
Boron	0.2	0.1		mg/L	01/26/2010 1932 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/26/2010 1152 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/26/2010 1932 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/26/2010 1152 MS	EPA 200.8
Iron	ND	0.05		mg/L	01/26/2010 1932 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/26/2010 1152 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 916 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/26/2010 1152 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/26/2010 1932 DG	EPA 200.7
Selenium	0.006	0.005		mg/L	01/26/2010 1152 MS	EPA 200.8
Uranium	0.071	0.001		mg/L	01/26/2010 1152 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/26/2010 1152 MS	EPA 200.8
Zinc	0.06	0.01		mg/L	01/26/2010 1932 DG	EPA 200.7
Total Metals						
Iron	0.05	0.05		mg/L	01/27/2010 1611 DG	EPA 200.7
Manganese	0.04	0.02		mg/L	01/27/2010 1611 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Connie Mattson

Connie Mattson, Project Manager

Page 2 of 8



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001288001

Project: ROSS
Lab ID: S1001288-001
Client Sample ID: TWO1
COC: 131198

Work Order: S1001288
Collection Date: 1/23/2010 1:30:00 PM
Date Received: 1/25/2010 8:10:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.19			s.u.	01/23/2010 1330	Field
Conductivity	2680			µmhos/cm	01/23/2010 1330	Field
Turbidity	0.19			NTU	01/23/2010 1330	Field
Temperature	7.5			°C	01/23/2010 1330	Field
General Parameters						
pH	8.4	0.1		s.u.	01/25/2010 1418 KO	SM 4500 H B
Electrical Conductivity	2000	5		µmhos/cm	01/25/2010 1418 KO	SM 2510B
Total Dissolved Solids (180)	1440	10		mg/L	01/25/2010 1625 AMB	SM 2540
Solids, Total Dissolved (Calc)	1280	10		mg/L	01/27/2010 1034 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	684	5		mg/L	01/25/2010 1418 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	02/03/2010 1555 SK	EPA 350.1
Gross Alpha	ND	2		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	ND	4.11		pCi/L	01/28/2010 737 SH	SM 7110B
Radium 226	0.20 ± 0.07	0.2		pCi/L	02/04/2010 1917 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/06/2010 205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	815	5		mg/L	01/25/2010 1418 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	10	5		mg/L	01/25/2010 1418 KO	SM 2320B
Chloride	5	1		mg/L	01/25/2010 2018 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	01/25/2010 1418 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/28/2010 1120 SK	EPA 353.2
Sulfate	393	1		mg/L	01/25/2010 2018 KO	EPA 300.0
Cations						
Calcium	8	1		mg/L	01/25/2010 2239 DG	EPA 200.7
Magnesium	4	1		mg/L	01/25/2010 2239 DG	EPA 200.7
Potassium	6	1		mg/L	01/25/2010 2239 DG	EPA 200.7
Sodium	457	1		mg/L	01/25/2010 2239 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 4



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001288001

Project: ROSS
Lab ID: S1001288-001
Client Sample ID: TWO1
COC: 131198

Work Order: S1001288
Collection Date: 1/23/2010 1:30:00 PM
Date Received: 1/25/2010 8:10:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	13.35	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Carbonate as CO ₃	0.32	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Chloride	0.13	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Sulfate	8.17	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Calcium	0.39	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Magnesium	0.32	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Potassium	0.16	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Sodium	19.87	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.75	0		meq/L	01/27/2010 1034 KO	SM 1030E
Anion Sum	22.05	0		meq/L	01/27/2010 1034 KO	SM 1030E
Cation-Anion Balance	3.04	0		%	01/27/2010 1034 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/25/2010 2239 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/25/2010 1455 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/25/2010 1455 MS	EPA 200.8
Boron	0.5	0.1		mg/L	01/25/2010 2239 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/25/2010 1455 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/25/2010 2239 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/25/2010 1455 MS	EPA 200.8
Iron	ND	0.05		mg/L	01/25/2010 2239 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/25/2010 1455 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 922 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/25/2010 1455 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/25/2010 2239 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/25/2010 1455 MS	EPA 200.8
Uranium	ND	0.001		mg/L	01/25/2010 1455 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/25/2010 1455 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	01/25/2010 2239 DG	EPA 200.7
Total Metals						
Iron	0.08	0.05		mg/L	01/26/2010 2142 DG	EPA 200.7
Manganese	ND	0.02		mg/L	01/26/2010 2142 DG	EPA 200.7

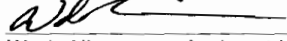
These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001288001

Project: ROSS
Lab ID: S1001288-002
Client Sample ID: TWO2
COC: 131198

Work Order: S1001288
Collection Date: 1/23/2010 2:00:00 PM
Date Received: 1/25/2010 8:10:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.10			s.u.	01/23/2010 1400	Field
Conductivity	2890			µmhos/cm	01/23/2010 1400	Field
Turbidity	0.56			NTU	01/23/2010 1400	Field
Temperature	5.5			°C	01/23/2010 1400	Field
General Parameters						
pH	8.3	0.1		s.u.	01/25/2010 1429 KO	SM 4500 H B
Electrical Conductivity	2110	5		µmhos/cm	01/25/2010 1429 KO	SM 2510B
Total Dissolved Solids (180)	1550	10		mg/L	01/25/2010 1630 AMB	SM 2540
Solids, Total Dissolved (Calc)	1420	10		mg/L	01/27/2010 1034 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	621	5		mg/L	01/25/2010 1429 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	02/03/2010 1556 SK	EPA 350.1
Gross Alpha	3.1 ± 2.4	2		pCi/L	01/28/2010 737 SH	SM 7110B
Gross Beta	8.6 ± 3.6	3.85		pCi/L	01/28/2010 737 SH	SM 7110B
Radium 226	0.49 ± 0.11	0.2		pCi/L	02/04/2010 1917 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	02/06/2010 205 SH	Ra-05
Anions						
Alkalinity, Bicarbonate as HCO ₃	757	5		mg/L	01/25/2010 1429 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	01/25/2010 1429 KO	SM 2320B
Chloride	10	1		mg/L	01/25/2010 2032 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	01/25/2010 1429 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	01/28/2010 1121 SK	EPA 353.2
Sulfate	513	1		mg/L	01/25/2010 2032 KO	EPA 300.0
Cations						
Calcium	24	1		mg/L	01/25/2010 2242 DG	EPA 200.7
Magnesium	11	1		mg/L	01/25/2010 2242 DG	EPA 200.7
Potassium	12	1		mg/L	01/25/2010 2242 DG	EPA 200.7
Sodium	477	1		mg/L	01/25/2010 2242 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

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- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 2/8/2010
Report ID: S1001288001

Project: ROSS
Lab ID: S1001288-002
Client Sample ID: TWO2
COC: 131198

Work Order: S1001288
Collection Date: 1/23/2010 2:00:00 PM
Date Received: 1/25/2010 8:10:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.41	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Chloride	0.27	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Sulfate	10.67	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Calcium	1.17	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Magnesium	0.86	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Potassium	0.29	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Sodium	20.75	0.01		meq/L	01/27/2010 1034 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.09	0		meq/L	01/27/2010 1034 KO	SM 1030E
Anion Sum	23.39	0		meq/L	01/27/2010 1034 KO	SM 1030E
Cation-Anion Balance	0.64	0		%	01/27/2010 1034 KO	SM 1030E
Dissolved Metals						
Aluminum	ND	0.1		mg/L	01/25/2010 2242 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	01/25/2010 1459 MS	EPA 200.8
Barium	ND	0.5		mg/L	01/25/2010 1459 MS	EPA 200.8
Boron	0.4	0.1		mg/L	01/25/2010 2242 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	01/25/2010 1459 MS	EPA 200.8
Chromium	ND	0.01		mg/L	01/25/2010 2242 DG	EPA 200.7
Copper	ND	0.01		mg/L	01/25/2010 1459 MS	EPA 200.8
Iron	ND	0.05		mg/L	01/25/2010 2242 DG	EPA 200.7
Lead	ND	0.02		mg/L	01/25/2010 1459 MS	EPA 200.8
Mercury	ND	0.001		mg/L	02/03/2010 924 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	01/25/2010 1459 MS	EPA 200.8
Nickel	ND	0.01		mg/L	01/25/2010 2242 DG	EPA 200.7
Selenium	ND	0.005		mg/L	01/25/2010 1459 MS	EPA 200.8
Uranium	ND	0.001		mg/L	01/25/2010 1459 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	01/25/2010 1459 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	01/25/2010 2242 DG	EPA 200.7
Total Metals						
Iron	0.13	0.05		mg/L	01/26/2010 2146 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	01/26/2010 2146 DG	EPA 200.7

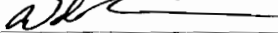
These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
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RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 4 of 4

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 19XX18 Date: 5-14-10 Time: 0900

Landowner

Name: Merit Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

IND
Stock ✓

Domestic _____

SEO Permitted Facility Name: Deadman Creek Permit No. P67747W
unit

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.71

Cond. 3.04 ms

Temp. °C 11.2

Turbidity (ntu) 0.97
7.54 mg/l

D.O. (mg/L) 69.4%

Water Level (ft): No ACCESS % Combustible Gas: _____

Casing Height (ft): _____ Ambient Air Temp: _____

Comments: Sampled for 4.14 Diss. & Sus. - water fizzy
but clear - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 22X-19 Date: 5-14-10 Time: 0930

Landowner

Name: Meit Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic _____

SEO Permitted Facility Name: Burlington Northern Inc. Permit No. P50917W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.95

Cond. 2.67 MS

Temp. °C 11.5

Turbidity (ntu) 0.22

D.O. (mg/L) 1.27 mg/L
11.8%

Water Level (ft): No Access % Combustible Gas: _____

Casing Height (ft): _____ Ambient Air Temp: _____

Comments: Sampled for 4.14 Diss. E. S4S. - Water
Clear - some bubbles - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CSWELLOI Date: 5-13-10 Time: 1515

Landowner

Name: Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic _____

SEO Permitted Facility Name: CAROL STRONG

Permit No. P132537W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.26

Cond. 3.08 MS

Temp. °C 9.0

Turbidity (ntu) 0.20

1.53 mg/l

D.O. (mg/L) 13.4 %

Water Level (ft): 149.40'

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Sampled collected for 4.14 Dias. & Sus. -
Water Clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS WELLO 3 Date: 5-18-10 Time: 1030

Landowner

Name: Carol Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: Ray W. Robinson Permit No. P619W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.18

Cond. 641 uS

Temp. °C 11.3

Turbidity (ntu) 1.61

1.64 mg/l

D.O. (mg/L) 15%

Water Level (ft): No Access

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 65°F / Windy

Comments: Water clear - no odor, addition 4.14
Dis. and Sus. Analysis

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: DW WELL 01 Date: 5-13-10 Time: 1230

Landowner

Name: Wood

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.50

Cond. 3.31 MS

Temp. °C 9.5

Turbidity (ntu) 6.22

2.21 mg/l

D.O. (mg/L) 19.6%

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Sampled for 4.14 Diss. & Sus. - water clear
- no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 03 Date: 5-14-10 Time: 1130

Landowner

Name: BERGER

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock P7324P1

Domestic _____

SEO Permitted Facility Name: Harry J. Berger Permit No. P7324P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.65

Cond. 1862 μ S

Temp. °C 9.6

Turbidity (ntu) 10.34

D.O. (mg/L) 2.30 mg/l
20.4%

Water Level (ft): No Access % Combustible Gas: _____

Casing Height (ft): _____ Ambient Air Temp: 60°F

Comments: Sampled for 4.14 Diss & Sus. analysis -
Water color - slight yellow brown - no odor
pump was running when I arrived - left
pump running.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HBWELLO4 Date: 5-13-10 Time: 1630

Landowner

Name: BERGER

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: Harry J. BERGER Permit No. P7326P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.45

Cond. 1671 μ S

Temp. °C 8.0

Turbidity (ntu) 2.15

D.O. (mg/L) 1.38 mg/L
11.3%

Water Level (ft): NO ACCESS % Combustible Gas: —

Casing Height (ft): — Ambient Air Temp: _____

Comments: Sampled for 4.14 Diss. & Sus. analysis -
Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 05 Date: 5-13-10 Time: 1400

Landowner

Name: Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) —

Stock ☒

Domestic ☒

SEO Permitted Facility Name: DELL B. EVANS

Permit No. P7430 ~~BP~~

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.78

Cond. 1542 μ S

Temp. °C 9.8

Turbidity (ntu) 82.0

3.03 mg/l

D.O. (mg/L) 27.0 %

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Sampled for 4.14 Diss & Sus. Analysis - Water
rust color - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P21129P P21128P Date: 6-24-10 Time: 1310

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr SESE

SEC 24

TWN 53

RNG 68

Picture #(s) 4

Stock ☒

Domestic _____

SEO Permitted Facility Name: ~~SWD~~

Permit No. P21129P

Location (Decimal Degrees)

Lat N 44.55662

Long W 104.97455

Elev. 4301

Water Quality

pH 8.60

Cond. 964 μ S

Temp. °C 12.1

Turbidity (ntu) 116

D.O. (mg/L) 2.66 / 24.4

Water Level (ft): 90.4'

% Combustible Gas: _____

Casing Height (ft): 1.20'

Ambient Air Temp: _____

Comments: Water turbid (light brown in color) -
no odor

X No Sample

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P22582P Date: 6-24-10 Time: 1400

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P22582P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

Temp. °C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Could not get pump to turn on?
Sampled this well last Fall.

* No sample

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50113 W Date: 6-23-10 Time: 1345

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

Temp. ° C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Well below Stormy's house on good Little
Creek. No access due to Alfalfa in field -
will get after haying.

** No Sample*

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50883W Date: 6-24-10 Time: 1230

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) ~~2, 3~~ *photos 2, 3*

Stock ☒

Domestic _____

SEO Permitted Facility Name: Gerald M. Wood Permit No. _____

Location (Decimal Degrees)

Lat N 44.56956

Long W 104.97060

Elev. 4238

Water Quality

pH _____

Cond. _____

Temp. °C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): _____ % Combustible Gas: _____

Casing Height (ft): _____ Ambient Air Temp: _____

Comments: Could not get well to turn on?

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P71108W(RAW) Date: 6-23-10 Time: 1215
Dallas & Anna's Well

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) —

Stock _____

Domestic ☒

SEO Permitted Facility Name: Philena Blatt Permit No. P71108W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.54

Cond. 1652 μ S

Temp. °C 10.5

Turbidity (ntu) 0.70

D.O. (mg/L) 0.94 / 8.0%

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 70°F

Comments: Dallas and Anna's Burch house well.
Water clear - no odor. Got water from
outside faucet (RAW)

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P71177W P17177W Date: 6-23-10 Time: 1300

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: Philena Blatt

Permit No. P71177W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

Temp. °C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: _____

Comments: Could not get pump to turn on?

* No sample

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P84665W Date: 6-23-10 Time: 1100

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: Philena Blatt

Permit No. P84665W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

Temp. °C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Could not sample due to no wind
for sample wind mill

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SB WELLOI Date: 6-23-10 Time: 1130

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 9.01

Cond. 1150 μ S

Temp. °C 11.3

Turbidity (ntu) 1.01

D.O. (mg/L) 1.10 / 10.1

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 70°F

Comments: Stormy and Becky's house well and surrounding
facilities - water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SB WELLO 2 Date: 6-23-10 Time: 1330

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.78

Cond. 789 μ S

Temp. °C 10.8

Turbidity (ntu) 1.75

D.O. (mg/L) 0.82 / 7.7%

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: First sample from well - water
clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TWO1 Date: 5-13-10 Time: 1030

Landowner

Name: T. J. Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic ☒

SEO Permitted Facility Name: John and Rondi
yard.

Permit No. P74302W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.33

Cond. 1989 μ S

Temp. °C 8.7

Turbidity (ntu) 1.33

D.O. (mg/L) 1.29 mg/L
10.9%

Water Level (ft): 27.7'

% Combustible Gas: —

Casing Height (ft): _____

Ambient Air Temp: 50°F

Comments: Sampled for 4.14 Diss. & Susp. Analysis - Water
Clear - No odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW02 Date: 5-13-10 Time: 1030

Landowner

Name: TJ Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: Vesta Louisa Wesley

Permit No. P103666W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.18

Cond. 2.88 mS

Temp. °C 8.8

Turbidity (ntu) 0.89

D.O. (mg/L) 2.29 mg/l
19.9%

Water Level (ft): 15.30'

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Grabbed sample for 4.14 Diss. & Sus. - water
clear - no odor.



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-002
Client Sample ID: 19XX18
COC: 131145

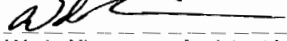
Work Order: S1005182
Collection Date: 5/14/2010 9:00:00 AM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.71	s.u.			05/14/2010 900	Field
Conductivity	3040	µm		hos/cm	05/14/2010 900	Field
Dissolved Oxygen	7.54	mg		/L	05/14/2010 900	Field
Dissolved Oxygen (pct)	69.4			%	05/14/2010 900	Field
Turbidity	0.97	NT		U	05/14/2010 900	Field
Temperature	11.2	°C			05/14/2010 900	Field
General Parameters						
pH	8.5	0.1		s.u.	05/15/2010 1656 KO	SM 4500 H B
Electrical Conductivity	2390	5		µmhos/cm	07/12/2010 2119 KO	SM 2510B
Total Dissolved Solids (180)	1690	10		mg/L	05/17/2010 1020 MJH	SM 2540
Solids, Total Dissolved (Calc)	1500	10		mg/L	05/19/2010 1137 KO	SM 1030E
Alkalinity, Total (As CaCO3)	521	5		mg/L	05/15/2010 1656 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	05/28/2010 1149 AS	EPA 350.1
Gross Alpha	267 ± 12	2		pCi/L	05/26/2010 820 SH	SM 7110B
Gross Beta	65.7 ± 5.0	4.10		pCi/L	05/26/2010 820 SH	SM 7110B
Radium 226 (Dissolved)	43.7 ± 0.90	0.2		pCi/L	05/26/2010 1115 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.31 ± 0.08	0.2		pCi/L	05/26/2010 1745 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	3.04 ± .069	1		pCi/L	05/27/2010 854 LJK	OTW01
Lead 210 Suspended	1.43 ± 0.61	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	4.04 ± 0.37	1		pCi/L	05/22/2010 1740 SH	OTW01
Polonium 210 Suspended	3.91 ± 0.36	1		pCi/L	05/25/2010 1539 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1448 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO3	605	5		mg/L	05/15/2010 1656 KO	SM 2320B
Alkalinity, Carbonate as CO3	15	5		mg/L	05/15/2010 1656 KO	SM 2320B
Chloride	8	1		mg/L	05/15/2010 1939 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	05/15/2010 1656 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	06/04/2010 915 AS	EPA 353.2
Sulfate	663	1		mg/L	05/15/2010 1939 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-002
Client Sample ID: 19XX18
COC: 131145

Work Order: S1005182
Collection Date: 5/14/2010 9:00:00 AM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	8	1		mg/L	05/17/2010 1659 RS	EPA 200.7
Magnesium	3	1		mg/L	05/17/2010 1659 RS	EPA 200.7
Potassium	4	1		mg/L	05/17/2010 1659 RS	EPA 200.7
Sodium	499	1		mg/L	05/17/2010 1659 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.91	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Carbonate as CO ₃	0.50	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Chloride	0.21	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Sulfate	13.79	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Calcium	0.38	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Magnesium	0.20	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Potassium	0.10	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Sodium	21.69	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	22.39	0		meq/L	05/19/2010 1137 KO	SM 1030E
Anion Sum	24.45	0		meq/L	05/19/2010 1137 KO	SM 1030E
Cation-Anion Balance	4.39	0		%	05/19/2010 1137 KO	SM 1030E

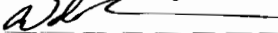
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-002
Client Sample ID: 19XX18
COC: 131145

Work Order: S1005182
Collection Date: 5/14/2010 9:00:00 AM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1659 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1109 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1109 MS	EPA 200.8
Boron	0.5	0.1		mg/L	05/17/2010 1659 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1109 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1659 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1109 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/17/2010 1659 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1109 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 803 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1109 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1659 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1109 MS	EPA 200.8
Uranium	0.089	0.001		mg/L	05/17/2010 1109 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1109 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/17/2010 1659 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	05/17/2010 1814 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/17/2010 1814 RS	EPA 200.7

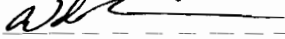
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-003
Client Sample ID: 22X-19
COC: 131145

Work Order: S1005182
Collection Date: 5/14/2010 9:30:00 AM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.95	s.u.			05/14/2010 930	Field
Conductivity	2670	µm		hos/cm	05/14/2010 930	Field
Dissolved Oxygen	1.27	mg		/L	05/14/2010 930	Field
Dissolved Oxygen (pct)	11.8			%	05/14/2010 930	Field
Turbidity	0.22	NT		U	05/14/2010 930	Field
Temperature	11.5	°C			05/14/2010 930	Field
General Parameters						
pH	8.6	0.1		s.u.	05/15/2010 1706 KO	SM 4500 H B
Electrical Conductivity	1840	5		µmhos/cm	05/15/2010 1706 KO	SM 2510B
Total Dissolved Solids (180)	1440	10		mg/L	05/17/2010 1025 MJH	SM 2540
Solids, Total Dissolved (Calc)	1300	10		mg/L	05/19/2010 1137 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	462	5		mg/L	05/15/2010 1706 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	05/28/2010 1150 AS	EPA 350.1
Gross Alpha	45.3 ± 5.0	2		pCi/L	05/26/2010 820 SH	SM 7110B
Gross Beta	9.3 ± 3.8	4.10		pCi/L	05/26/2010 820 SH	SM 7110B
Radium 226 (Dissolved)	3.05 ± 0.23	0.2		pCi/L	05/26/2010 1327 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	05/26/2010 1745 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 854 LJK	OTW01
Lead 210 Suspended	1.21 ± 0.69	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 1740 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	05/25/2010 1950 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1451 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	520	5		mg/L	05/15/2010 1706 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	21	5		mg/L	05/15/2010 1706 KO	SM 2320B
Chloride	13	1		mg/L	05/15/2010 1954 KO	EPA 300.0
Fluoride	0.7	0.1		mg/L	05/15/2010 1706 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 916 AS	EPA 353.2
Sulfate	535	1		mg/L	05/15/2010 1954 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-003
Client Sample ID: 22X-19
COC: 131145

Work Order: S1005182
Collection Date: 5/14/2010 9:30:00 AM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	6	1		mg/L	05/17/2010 1709 RS	EPA 200.7
Magnesium	2	1		mg/L	05/17/2010 1709 RS	EPA 200.7
Potassium	4	1		mg/L	05/17/2010 1709 RS	EPA 200.7
Sodium	465	1		mg/L	05/17/2010 1709 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.52	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Carbonate as CO ₃	0.71	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Chloride	0.35	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Sulfate	11.12	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Calcium	0.30	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Magnesium	0.14	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Potassium	0.11	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Sodium	20.21	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.78	0		meq/L	05/19/2010 1137 KO	SM 1030E
Anion Sum	20.76	0		meq/L	05/19/2010 1137 KO	SM 1030E
Cation-Anion Balance	0.04	0		%	05/19/2010 1137 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 8 of 9



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-003
Client Sample ID: 22X-19
COC: 131145

Work Order: S1005182
Collection Date: 5/14/2010 9:30:00 AM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1709 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1113 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1113 MS	EPA 200.8
Boron	0.4	0.1		mg/L	05/17/2010 1709 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1113 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1709 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1113 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/17/2010 1709 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1113 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 816 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1113 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1709 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1113 MS	EPA 200.8
Uranium	0.022	0.001		mg/L	05/17/2010 1113 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1113 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/17/2010 1709 RS	EPA 200.7
Total Metals						
Iron	0.05	0.05		mg/L	05/17/2010 1816 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/17/2010 1816 RS	EPA 200.7

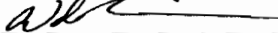
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-004
Client Sample ID: CSWELL01
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 3:15:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.26	s.u.			05/13/2010 1515	Field
Conductivity	3080	µm		hos/cm	05/13/2010 1515	Field
Dissolved Oxygen	1.53	mg		/L	05/13/2010 1515	Field
Dissolved Oxygen (pct)	13.4			%	05/13/2010 1515	Field
Turbidity	0.20	NT		U	05/13/2010 1515	Field
Temperature	9.0	°C			05/13/2010 1515	Field
General Parameters						
pH	8.4	0.1		s.u.	05/15/2010 1836 KO	SM 4500 H B
Electrical Conductivity	1930	5		µmhos/cm	05/15/2010 1836 KO	SM 2510B
Total Dissolved Solids (180)	1610	10		mg/L	05/17/2010 1105 MJH	SM 2540
Solids, Total Dissolved (Calc)	1530	10		mg/L	05/19/2010 1136 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	637	5		mg/L	05/15/2010 1836 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	06/02/2010 1113 AS	EPA 350.1
Gross Alpha	9.5 ± 3.6	2		pCi/L	05/27/2010 642 SH	SM 7110B
Gross Beta	6.6 ± 4.7	5		pCi/L	05/27/2010 642 SH	SM 7110B
Radium 226 (Dissolved)	0.50 ± 0.10	0.2		pCi/L	05/26/2010 1327 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	05/26/2010 2011 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 1109 LJK	OTW01
Lead 210 Suspended	ND	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 2213 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	05/25/2010 1950 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1509 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	760	5		mg/L	05/15/2010 1836 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	9	5		mg/L	05/15/2010 1836 KO	SM 2320B
Chloride	6	1		mg/L	05/15/2010 2232 KO	EPA 300.0
Fluoride	0.4	0.1		mg/L	05/15/2010 1836 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.6	0.1		mg/L	05/28/2010 1555 AS	EPA 353.2
Sulfate	558	1		mg/L	05/15/2010 2232 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-004
Client Sample ID: CSWELL01
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 3:15:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	29	1		mg/L	05/17/2010 1737 RS	EPA 200.7
Magnesium	19	1		mg/L	05/17/2010 1737 RS	EPA 200.7
Potassium	11	1		mg/L	05/17/2010 1737 RS	EPA 200.7
Sodium	527	1		mg/L	05/17/2010 1737 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.45	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Carbonate as CO ₃	0.29	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Chloride	0.16	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sulfate	11.61	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Calcium	1.44	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Magnesium	1.53	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Potassium	0.27	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sodium	22.92	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	26.18	0		meq/L	05/19/2010 1136 KO	SM 1030E
Anion Sum	24.55	0		meq/L	05/19/2010 1136 KO	SM 1030E
Cation-Anion Balance	3.22	0		%	05/19/2010 1136 KO	SM 1030E

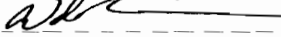
These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-004
Client Sample ID: CSWELL01
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 3:15:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1737 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1142 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1142 MS	EPA 200.8
Boron	0.4	0.1		mg/L	05/17/2010 1737 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1142 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1737 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1142 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/17/2010 1737 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1142 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 830 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1142 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1737 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1142 MS	EPA 200.8
Uranium	0.015	0.001		mg/L	05/17/2010 1142 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1142 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/17/2010 1737 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	05/17/2010 1841 RS	EPA 200.7
Manganese	0.02	0.02		mg/L	05/17/2010 1841 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005250002
(Replaces S1005250001)

Project: Ross ISR
Lab ID: S1005250-001
Client Sample ID: CSWELL03
COC: 131164

Work Order: S1005250
Collection Date: 5/18/2010 10:30:00 AM
Date Received: 5/19/2010 10:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.18	s.u.			05/18/2010 1030	Field
Conductivity	641	µm		hos/cm	05/18/2010 1030	Field
Dissolved Oxygen	1.64	mg		/L	05/18/2010 1030	Field
Dissolved Oxygen (pct)	15			%	05/18/2010 1030	Field
Turbidity	4.61	NT		U	05/18/2010 1030	Field
Temperature	11.3	°C			05/18/2010 1030	Field
General Parameters						
pH	8.4	0.1		s.u.	05/19/2010 2114 KO	SM 4500 H B
Electrical Conductivity	543	5		µmhos/cm	05/19/2010 2114 KO	SM 2510B
Total Dissolved Solids (180)	390	10		mg/L	05/20/2010 1021 MJH	SM 2540
Solids, Total Dissolved (Calc)	360	10		mg/L	06/02/2010 846 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	318	5		mg/L	05/19/2010 2114 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	06/02/2010 1451 AS	EPA 350.1
Gross Alpha	2.5 ± 2.0	2		pCi/L	06/20/2010 2056 SH	SM 7110B
Gross Beta	7.7 ± 2.3	3		pCi/L	06/20/2010 2056 SH	SM 7110B
Radium 226 (Dissolved)	0.30 ± 0.10	0.2		pCi/L	06/13/2010 1533 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	06/14/2010 1845 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	06/14/2010 304 SH	Ra-05
Lead 210	ND	1		pCi/L	06/10/2010 1217 SH	OTW01
Lead 210 Suspended	ND	1		pCi/L	06/10/2010 1653 SH	OTW01
Polonium 210	ND	1		pCi/L	06/08/2010 1522 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	06/09/2010 1342 SH	OTW01
Thorium 230	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2	L	pCi/L	06/19/2010 000 WN	ACW10
Uranium Suspended	0.022	0.001		mg/L	05/25/2010 1333 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	379	5		mg/L	05/19/2010 2114 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	05/19/2010 2114 KO	SM 2320B
Chloride	3	1		mg/L	05/19/2010 2138 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	05/19/2010 2114 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	05/28/2010 1642 AS	EPA 353.2
Sulfate	28	1		mg/L	05/19/2010 2138 KO	EPA 300.0


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005250002
(Replaces S1005250001)

Project: Ross ISR
Lab ID: S1005250-001
Client Sample ID: CSWELL03
COC: 131164

Work Order: S1005250
Collection Date: 5/18/2010 10:30:00 AM
Date Received: 5/19/2010 10:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	35	1		mg/L	05/20/2010 1353 RS	EPA 200.7
Magnesium	18	1		mg/L	05/20/2010 1353 RS	EPA 200.7
Potassium	9	1		mg/L	05/20/2010 1353 RS	EPA 200.7
Sodium	76	1		mg/L	05/20/2010 1353 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.21	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Chloride	0.09	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Fluoride	ND	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Sulfate	0.58	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Calcium	1.72	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Magnesium	1.50	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Potassium	0.23	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Sodium	3.31	0.01		meq/L	06/02/2010 846 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	6.78	0		meq/L	06/02/2010 846 KO	SM 1030E
Anion Sum	7.05	0		meq/L	06/02/2010 846 KO	SM 1030E
Cation-Anion Balance	1.97	0		%	06/02/2010 846 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 6/28/2010
Report ID: S1005250002
(Replaces S1005250001)

Project: Ross ISR
Lab ID: S1005250-001
Client Sample ID: CSWELL03
COC: 131164

Work Order: S1005250
Collection Date: 5/18/2010 10:30:00 AM
Date Received: 5/19/2010 10:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/20/2010 1353 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/19/2010 1752 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/19/2010 1752 MS	EPA 200.8
Boron	ND	0.1		mg/L	05/20/2010 1353 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/19/2010 1752 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/20/2010 1353 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/19/2010 1752 MS	EPA 200.8
Iron	0.55	0.05		mg/L	05/20/2010 1353 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/19/2010 1752 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/21/2010 1211 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/19/2010 1752 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/20/2010 1353 RS	EPA 200.7
Selenium	0.006	0.005		mg/L	05/19/2010 1752 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	05/19/2010 1752 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/19/2010 1752 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/20/2010 1353 RS	EPA 200.7
Total Metals						
Iron	1.30	0.05		mg/L	05/20/2010 1803 RS	EPA 200.7
Manganese	0.34	0.02		mg/L	05/20/2010 1803 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-002
Client Sample ID: DWWELL01
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 12:30:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.50	s.u.			05/13/2010 1230	Field
Conductivity	3310	µm		hos/cm	05/13/2010 1230	Field
Dissolved Oxygen	2.21	mg		/L	05/13/2010 1230	Field
Dissolved Oxygen (pct)	19.6			%	05/13/2010 1230	Field
Turbidity	6.22	NT		U	05/13/2010 1230	Field
Temperature	9.5	°C			05/13/2010 1230	Field
General Parameters						
pH	8.4	0.1		s.u.	05/15/2010 1814 KO	SM 4500 H B
Electrical Conductivity	2210	5		µmhos/cm	05/15/2010 1814 KO	SM 2510B
Total Dissolved Solids (180)	1820	10		mg/L	05/17/2010 1050 MJH	SM 2540
Solids, Total Dissolved (Calc)	1750	10		mg/L	05/19/2010 1136 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	586	5		mg/L	05/15/2010 1814 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	05/28/2010 1154 AS	EPA 350.1
Gross Alpha	12.0 ± 3.8	2		pCi/L	05/27/2010 642 SH	SM 7110B
Gross Beta	10.5 ± 4.6	4.8		pCi/L	05/27/2010 642 SH	SM 7110B
Radium 226 (Dissolved)	0.37 ± 0.08	0.2		pCi/L	05/26/2010 1327 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	05/26/2010 2011 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 1109 LJK	OTW01
Lead 210 Suspended	1.78 ± 0.75	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 2213 SH	OTW01
Polonium 210 Suspended	9.2 ± 0.55	1		pCi/L	05/25/2010 1950 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1505 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	689	5		mg/L	05/15/2010 1814 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	13	5		mg/L	05/15/2010 1814 KO	SM 2320B
Chloride	11	1		mg/L	05/15/2010 2051 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	05/15/2010 1814 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 920 AS	EPA 353.2
Sulfate	727	1		mg/L	05/15/2010 2051 KO	EPA 300.0

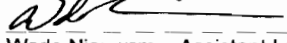
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-002
Client Sample ID: DWWELL01
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 12:30:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	17	1		mg/L	05/17/2010 1728 RS	EPA 200.7
Magnesium	6	1		mg/L	05/17/2010 1728 RS	EPA 200.7
Potassium	12	1		mg/L	05/17/2010 1728 RS	EPA 200.7
Sodium	624	1		mg/L	05/17/2010 1728 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.30	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Carbonate as CO ₃	0.41	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Chloride	0.30	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sulfate	15.14	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Calcium	0.85	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Magnesium	0.47	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Potassium	0.31	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sodium	27.13	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	28.78	0		meq/L	05/19/2010 1136 KO	SM 1030E
Anion Sum	27.20	0		meq/L	05/19/2010 1136 KO	SM 1030E
Cation-Anion Balance	2.81	0		%	05/19/2010 1136 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-002
Client Sample ID: DWWELL01
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 12:30:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1728 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1134 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1134 MS	EPA 200.8
Boron	0.5	0.1		mg/L	05/17/2010 1728 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1134 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1728 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1134 MS	EPA 200.8
Iron	0.66	0.05		mg/L	05/17/2010 1728 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1134 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 823 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1134 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1728 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1134 MS	EPA 200.8
Uranium	ND	0.001		mg/L	05/17/2010 1134 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1134 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/17/2010 1728 RS	EPA 200.7
Total Metals						
Iron	1.73	0.05		mg/L	05/17/2010 1834 RS	EPA 200.7
Manganese	0.03	0.02		mg/L	05/17/2010 1834 RS	EPA 200.7

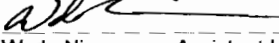
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005184003
(Replaces S1005184002)

Project: ROSS ISR
Lab ID: S1005184-002
Client Sample ID: HBWELL03
COC: 131148

Work Order: S1005184
Collection Date: 5/14/2010 10:30:00 AM
Date Received: 5/14/2010 4:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.65	s.u.			05/14/2010 1030	Field
Conductivity	1862	µm		hos/cm	05/14/2010 1030	Field
Dissolved Oxygen	2.30	mg		/L	05/14/2010 1030	Field
Dissolved Oxygen (pct)	20.4			%	05/14/2010 1030	Field
Turbidity	10.34	NT		U	05/14/2010 1030	Field
Temperature	9.6	°C			05/14/2010 1030	Field
General Parameters						
pH	8.0	0.1		s.u.	05/15/2010 1741 KO	SM 4500 H B
Electrical Conductivity	1790	5		µmhos/cm	07/14/2010 1508 KO	SM 2510B
Total Dissolved Solids (180)	1370	10		mg/L	05/17/2010 1040 MJH	SM 2540
Solids, Total Dissolved (Calc)	1270	10		mg/L	05/19/2010 1136 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	494	5		mg/L	05/15/2010 1741 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	05/28/2010 1152 AS	EPA 350.1
Gross Alpha	7.1 ± 2.7	2		pCi/L	05/26/2010 820 SH	SM 7110B
Gross Beta	11.5 ± 3.7	3.9		pCi/L	05/26/2010 820 SH	SM 7110B
Radium 226 (Dissolved)	1.03 ± 0.13	0.2		pCi/L	05/26/2010 1327 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.32 ± 0.08	0.2		pCi/L	05/26/2010 2011 SH	SM 7500-Ra B
Total Radium 228	1.20 ± 0.79	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 1109 LJK	OTW01
Lead 210 Suspended	1.21 ± 0.65	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 2213 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	05/25/2010 1950 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1455 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	603	5		mg/L	05/15/2010 1741 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	05/15/2010 1741 KO	SM 2320B
Chloride	13	1		mg/L	05/15/2010 2022 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	05/15/2010 1741 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 918 AS	EPA 353.2
Sulfate	540	1		mg/L	05/15/2010 2022 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by:



Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005184003
(Replaces S1005184002)

Project: ROSS ISR
Lab ID: S1005184-002
Client Sample ID: HBWELL03
COC: 131148

Work Order: S1005184
Collection Date: 5/14/2010 10:30:00 AM
Date Received: 5/14/2010 4:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	106	1		mg/L	05/17/2010 1716 RS	EPA 200.7
Magnesium	56	1		mg/L	05/17/2010 1716 RS	EPA 200.7
Potassium	17	1		mg/L	05/17/2010 1716 RS	EPA 200.7
Sodium	238	1		mg/L	05/17/2010 1716 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.88	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Chloride	0.37	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sulfate	11.24	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Calcium	5.28	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Magnesium	4.62	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Potassium	0.43	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sodium	10.34	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.69	0		meq/L	05/19/2010 1136 KO	SM 1030E
Anion Sum	21.51	0		meq/L	05/19/2010 1136 KO	SM 1030E
Cation-Anion Balance	1.95	0		%	05/19/2010 1136 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005184003
(Replaces S1005184002)

Project: ROSS ISR
Lab ID: S1005184-002
Client Sample ID: HBWELL03
COC: 131148

Work Order: S1005184
Collection Date: 5/14/2010 10:30:00 AM
Date Received: 5/14/2010 4:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1716 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1120 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1120 MS	EPA 200.8
Boron	0.1	0.1		mg/L	05/17/2010 1716 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1120 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1716 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1120 MS	EPA 200.8
Iron	2.78	0.05		mg/L	05/17/2010 1716 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1120 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 819 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1120 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1716 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1120 MS	EPA 200.8
Uranium	0.006	0.001		mg/L	05/17/2010 1120 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1120 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/17/2010 1716 RS	EPA 200.7
Total Metals						
Iron	3.86	0.05		mg/L	05/17/2010 1821 RS	EPA 200.7
Manganese	0.25	0.02		mg/L	05/17/2010 1821 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-001
Client Sample ID: HBWELL04
COC: 131145

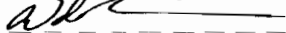
Work Order: S1005182
Collection Date: 5/13/2010 4:30:00 PM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.45	s.u.			05/13/2010 1630	Field
Conductivity	1671	µm		hos/cm	05/13/2010 1630	Field
Dissolved Oxygen	1.38	mg		/L	05/13/2010 1630	Field
Dissolved Oxygen (pct)	11.3			%	05/13/2010 1630	Field
Turbidity	2.15	NT		U	05/13/2010 1630	Field
Temperature	8.0	°C			05/13/2010 1630	Field
General Parameters						
pH	7.8	0.1		s.u.	05/15/2010 1645 KO	SM 4500 H B
Electrical Conductivity	1640	5		µmhos/cm	07/12/2010 2121 KO	SM 2510B
Total Dissolved Solids (180)	1380	10		mg/L	05/17/2010 1015 MJH	SM 2540
Solids, Total Dissolved (Calc)	1190	10		mg/L	05/19/2010 1137 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	354	5		mg/L	05/15/2010 1645 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	06/02/2010 1111 AS	EPA 350.1
Gross Alpha	12.1 ± 2.3	2		pCi/L	05/26/2010 820 SH	SM 7110B
Gross Beta	11.0 ± 2.1	3		pCi/L	05/26/2010 820 SH	SM 7110B
Radium 226 (Dissolved)	0.31 ± 0.08	0.2		pCi/L	05/26/2010 1115 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	05/26/2010 1745 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/23/2010 2210 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 854 LJK	OTW01
Lead 210 Suspended	1.80 ± 0.59	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 1740 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	05/25/2010 1539 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1441 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	432	5		mg/L	05/15/2010 1645 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	05/15/2010 1645 KO	SM 2320B
Chloride	14	1		mg/L	05/15/2010 1925 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	05/15/2010 1645 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.9	0.1		mg/L	06/04/2010 914 AS	EPA 353.2
Sulfate	591	1		mg/L	05/15/2010 1925 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-001
Client Sample ID: HBWELL04
COC: 131145

Work Order: S1005182
Collection Date: 5/13/2010 4:30:00 PM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	195	1		mg/L	05/17/2010 1657 RS	EPA 200.7
Magnesium	58	1		mg/L	05/17/2010 1657 RS	EPA 200.7
Potassium	7	1		mg/L	05/17/2010 1657 RS	EPA 200.7
Sodium	117	1		mg/L	05/17/2010 1657 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.07	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Chloride	0.38	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Fluoride	ND	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Sulfate	12.31	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Calcium	9.70	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Magnesium	4.72	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Potassium	0.18	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Sodium	5.10	0.01		meq/L	05/19/2010 1137 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.72	0		meq/L	05/19/2010 1137 KO	SM 1030E
Anion Sum	19.78	0		meq/L	05/19/2010 1137 KO	SM 1030E
Cation-Anion Balance	0.14	0		%	05/19/2010 1137 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005182004
(Replaces S1005182003)

Project: Ross ISR
Lab ID: S1005182-001
Client Sample ID: HBWELL04
COC: 131145

Work Order: S1005182
Collection Date: 5/13/2010 4:30:00 PM
Date Received: 5/14/2010
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1657 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1059 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1059 MS	EPA 200.8
Boron	ND	0.1		mg/L	05/17/2010 1657 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1059 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1657 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1059 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/17/2010 1657 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1059 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 801 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1059 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1657 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1059 MS	EPA 200.8
Uranium	0.034	0.001		mg/L	05/17/2010 1059 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1059 MS	EPA 200.8
Zinc	0.04	0.01		mg/L	05/17/2010 1657 RS	EPA 200.7
Total Metals						
Iron	0.46	0.05		mg/L	05/17/2010 1811 RS	EPA 200.7
Manganese	0.07	0.02		mg/L	05/17/2010 1811 RS	EPA 200.7

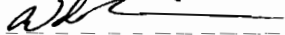
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-003
Client Sample ID: HBWELL05
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 2:00:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.78	s.u.			05/13/2010 1400	Field
Conductivity	1542	µm		hos/cm	05/13/2010 1400	Field
Dissolved Oxygen	3.03	mg		/L	05/13/2010 1400	Field
Dissolved Oxygen (pct)	27.0			%	05/13/2010 1400	Field
Turbidity	82.0	NT		U	05/13/2010 1400	Field
Temperature	9.8	°C			05/13/2010 1400	Field
General Parameters						
pH	8.0	0.1		s.u.	05/15/2010 1825 KO	SM 4500 H B
Electrical Conductivity	1370	5		µmhos/cm	05/15/2010 1825 KO	SM 2510B
Total Dissolved Solids (180)	1160	10		mg/L	05/17/2010 1100 MJH	SM 2540
Solids, Total Dissolved (Calc)	1070	10		mg/L	05/19/2010 1136 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	527	5		mg/L	05/15/2010 1825 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	06/02/2010 1112 AS	EPA 350.1
Gross Alpha	7.5 ± 2.4	2		pCi/L	05/27/2010 642 SH	SM 7110B
Gross Beta	6.4 ± 2.4	3		pCi/L	05/27/2010 642 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	05/26/2010 1327 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	05/26/2010 2011 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 1109 LJK	OTW01
Lead 210 Suspended	1.56 ± 0.59	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 2213 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	05/25/2010 1950 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1507 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	642	5		mg/L	05/15/2010 1825 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	05/15/2010 1825 KO	SM 2320B
Chloride	5	1		mg/L	05/15/2010 2105 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	05/15/2010 1825 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.2	0.1		mg/L	05/28/2010 1554 AS	EPA 353.2
Sulfate	381	1		mg/L	05/15/2010 2105 KO	EPA 300.0


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-003
Client Sample ID: HBWELL05
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 2:00:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	79	1		mg/L	05/17/2010 1730 RS	EPA 200.7
Magnesium	33	1		mg/L	05/17/2010 1730 RS	EPA 200.7
Potassium	7	1		mg/L	05/17/2010 1730 RS	EPA 200.7
Sodium	251	1		mg/L	05/17/2010 1730 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.53	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Chloride	0.12	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sulfate	7.94	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Calcium	3.94	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Magnesium	2.71	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Potassium	0.17	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sodium	10.91	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.74	0		meq/L	05/19/2010 1136 KO	SM 1030E
Anion Sum	18.61	0		meq/L	05/19/2010 1136 KO	SM 1030E
Cation-Anion Balance	2.38	0		%	05/19/2010 1136 KO	SM 1030E

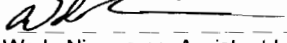
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-003
Client Sample ID: HBWELL05
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 2:00:00 PM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1730 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1138 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1138 MS	EPA 200.8
Boron	0.2	0.1		mg/L	05/17/2010 1730 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1138 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1730 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1138 MS	EPA 200.8
Iron	1.17	0.05		mg/L	05/17/2010 1730 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1138 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 829 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1138 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1730 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1138 MS	EPA 200.8
Uranium	0.010	0.001		mg/L	05/17/2010 1138 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1138 MS	EPA 200.8
Zinc	ND	0.01		mg/L	05/17/2010 1730 RS	EPA 200.7
Total Metals						
Iron	7.38	0.05		mg/L	05/17/2010 1839 RS	EPA 200.7
Manganese	0.11	0.02		mg/L	05/17/2010 1839 RS	EPA 200.7

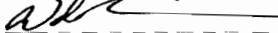
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006467001

Project: ROSS ISR
Lab ID: S1006467-001
Client Sample ID: P21128P
COC: 131151

Work Order: S1006467
Collection Date: 6/24/2010 1:10:00 PM
Date Received: 6/25/2010 8:14:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.60			s.u.	06/24/2010 1310	Field
Conductivity	964			µmhos/cm	06/24/2010 1310	Field
Dissolved Oxygen	2.66			mg/L	06/24/2010 1310	Field
Dissolved Oxygen (pct)	24.4			%	06/24/2010 1310	Field
Turbidity	116			NTU	06/24/2010 1310	Field
Temperature	12.1			°C	06/24/2010 1310	Field
General Parameters						
pH	8.4	0.1		s.u.	06/25/2010 2037 KO	SM 4500 H B
Electrical Conductivity	962	5		µmhos/cm	06/25/2010 2037 KO	SM 2510B
Total Dissolved Solids (180)	640	10		mg/L	06/25/2010 1410 MJH	SM 2540
Solids, Total Dissolved (Calc)	580	10		mg/L	07/01/2010 1433 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	414	5		mg/L	06/25/2010 2037 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/06/2010 1349 AS	EPA 350.1
Gross Alpha	239 ± 11	2		pCi/L	07/16/2010 1704 SH	SM 7110B
Gross Beta	123.2 ± 5.3	3.6		pCi/L	07/16/2010 1704 SH	SM 7110B
Radium 226 (Dissolved)	0.21 ± 0.09	0.2		pCi/L	07/28/2010 1338 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.91 ± 0.15	0.2		pCi/L	07/29/2010 1837 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/03/2010 2228 SH	Ra-05
Lead 210 (Dissolved)	1.76 ± 0.58	1		pCi/L	07/27/2010 1523 SH	OTW01
Lead 210 (Suspended)	1.26 ± 0.52	1		pCi/L	07/23/2010 2138 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	07/27/2010 2018 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	07/26/2010 2319 SH	OTW01
Thorium 230 (Dissolved)	ND	0.58	L	pCi/L	07/28/2010 000 LJK	ACW10
Thorium 230 (Suspended)	0.49 ± 0.16	0.2	L	pCi/L	07/28/2010 000 LJK	ACW10
Uranium Suspended	0.004	0.001		mg/L	07/01/2010 1426 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	491	5		mg/L	06/25/2010 2037 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	7	5		mg/L	06/25/2010 2037 KO	SM 2320B
Chloride	3	1		mg/L	06/28/2010 1845 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	06/25/2010 2037 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.3	0.1		mg/L	07/08/2010 1157 AS	EPA 353.2
Sulfate	96	1		mg/L	06/28/2010 1845 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006467001

Project: ROSS ISR
Lab ID: S1006467-001
Client Sample ID: P21128P
COC: 131151

Work Order: S1006467
Collection Date: 6/24/2010 1:10:00 PM
Date Received: 6/25/2010 8:14:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	19	1		mg/L	06/25/2010 1447 DG	EPA 200.7
Magnesium	9	1		mg/L	06/25/2010 1447 DG	EPA 200.7
Potassium	18	1		mg/L	06/25/2010 1447 DG	EPA 200.7
Sodium	185	1		mg/L	06/25/2010 1447 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.04	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Carbonate as CO ₃	0.23	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Chloride	0.08	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Fluoride	ND	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Sulfate	1.99	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Calcium	0.93	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Magnesium	0.77	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Potassium	0.44	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Sodium	8.04	0.01		meq/L	07/01/2010 1433 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.19	0		meq/L	07/01/2010 1433 KO	SM 1030E
Anion Sum	10.36	0		meq/L	07/01/2010 1433 KO	SM 1030E
Cation-Anion Balance	0.83	0		%	07/01/2010 1433 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006467001

Project: ROSS ISR
Lab ID: S1006467-001
Client Sample ID: P21128P
COC: 131151

Work Order: S1006467
Collection Date: 6/24/2010 1:10:00 PM
Date Received: 6/25/2010 8:14:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	0.1	0.1		mg/L	06/25/2010 1447 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	06/25/2010 1617 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/25/2010 1617 MS	EPA 200.8
Boron	ND	0.1		mg/L	06/25/2010 1447 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/25/2010 1617 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/25/2010 1447 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/25/2010 1617 MS	EPA 200.8
Iron	0.10	0.05		mg/L	06/25/2010 1447 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/25/2010 1617 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/01/2010 840 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/25/2010 1617 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/25/2010 1447 DG	EPA 200.7
Selenium	0.127	0.005		mg/L	06/25/2010 1617 MS	EPA 200.8
Uranium	0.388	0.001		mg/L	06/25/2010 1617 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/25/2010 1617 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/25/2010 1447 DG	EPA 200.7
Total Metals						
Iron	5.81	0.05		mg/L	06/28/2010 1702 DG	EPA 200.7
Manganese	0.17	0.02		mg/L	06/28/2010 1702 DG	EPA 200.7

These results apply only to the samples tested.

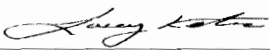
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:


Lacey Ketron, Project Manager

Page 3 of 3



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-002
Client Sample ID: P71108W (RAW)
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 12:15:00 PM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.54			s.u.	06/23/2010 1215	Field
Conductivity	1652			µmhos/cm	06/23/2010 1215	Field
Dissolved Oxygen	0.94			mg/L	06/23/2010 1215	Field
Dissolved Oxygen (pct)	8.0			%	06/23/2010 1215	Field
Turbidity	0.70			NTU	06/23/2010 1215	Field
Temperature	10.5			°C	06/23/2010 1215	Field
General Parameters						
pH	8.0	0.1		s.u.	06/25/2010 2017 KO	SM 4500 H B
Electrical Conductivity	1670	5		µmhos/cm	06/25/2010 2017 KO	SM 2510B
Total Dissolved Solids (180)	1200	10		mg/L	06/25/2010 1400 MJH	SM 2540
Solids, Total Dissolved (Calc)	1100	10		mg/L	07/01/2010 1430 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	541	5		mg/L	06/25/2010 2017 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/06/2010 1632 AS	EPA 350.1
Gross Alpha	40.0 ± 4.9	3.7		pCi/L	07/10/2010 1009 SH	SM 7110B
Gross Beta	14.8 ± 4.2	7		pCi/L	07/10/2010 1009 SH	SM 7110B
Radium 226 (Dissolved)	0.22 ± 0.09	0.2		pCi/L	07/28/2010 1124 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/29/2010 1630 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.07 ± 0.69	1		pCi/L	07/20/2010 120 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	07/27/2010 1317 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	07/23/2010 1631 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	07/27/2010 1756 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	07/26/2010 1712 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	07/30/2010 000 LJK	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	07/30/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	07/01/2010 1419 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	660	5		mg/L	06/25/2010 2017 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	06/25/2010 2017 KO	SM 2320B
Chloride	5	1		mg/L	06/28/2010 1825 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	06/25/2010 2017 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.2	0.1		mg/L	07/08/2010 1155 AS	EPA 353.2
Sulfate	387	1		mg/L	06/28/2010 1825 KO	EPA 300.0

These results apply only to the samples tested.

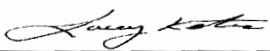
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:


Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-002
Client Sample ID: P71108W (RAW)
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 12:15:00 PM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	70	1		mg/L	06/25/2010 1442 DG	EPA 200.7
Magnesium	71	1		mg/L	06/25/2010 1442 DG	EPA 200.7
Potassium	9	1		mg/L	06/25/2010 1442 DG	EPA 200.7
Sodium	230	1		mg/L	06/25/2010 1442 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.82	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Chloride	0.14	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Fluoride	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Sulfate	8.06	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Calcium	3.48	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Magnesium	5.81	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Potassium	0.23	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Sodium	10.02	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.56	0		meq/L	07/01/2010 1430 KO	SM 1030E
Anion Sum	19.04	0		meq/L	07/01/2010 1430 KO	SM 1030E
Cation-Anion Balance	1.33	0		%	07/01/2010 1430 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-002
Client Sample ID: P71108W (RAW)
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 12:15:00 PM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/25/2010 1442 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	06/25/2010 1606 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/25/2010 1606 MS	EPA 200.8
Boron	ND	0.1		mg/L	06/25/2010 1442 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/25/2010 1606 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/25/2010 1442 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/25/2010 1606 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/25/2010 1442 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/25/2010 1606 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/01/2010 833 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/25/2010 1606 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/25/2010 1442 DG	EPA 200.7
Selenium	0.007	0.005		mg/L	06/25/2010 1606 MS	EPA 200.8
Uranium	0.064	0.001		mg/L	06/25/2010 1606 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/25/2010 1606 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	06/25/2010 1442 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	06/28/2010 1648 DG	EPA 200.7
Manganese	0.18	0.02		mg/L	06/28/2010 1648 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-001
Client Sample ID: SB Well 01
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 11:30:00 AM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.01			s.u.	06/23/2010 1130	Field
Conductivity	1150			µmhos/cm	06/23/2010 1130	Field
Dissolved Oxygen	1.10			mg/L	06/23/2010 1130	Field
Dissolved Oxygen (pct)	10.1			%	06/23/2010 1130	Field
Turbidity	1.01			NTU	06/23/2010 1130	Field
Temperature	11.3			°C	06/23/2010 1130	Field
General Parameters						
pH	8.7	0.1		s.u.	06/25/2010 2006 KO	SM 4500 H B
Electrical Conductivity	1140	5		µmhos/cm	06/25/2010 2006 KO	SM 2510B
Total Dissolved Solids (180)	750	10		mg/L	06/25/2010 1355 MJH	SM 2540
Solids, Total Dissolved (Calc)	690	10		mg/L	07/01/2010 1430 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	531	5		mg/L	06/25/2010 2006 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/06/2010 1631 AS	EPA 350.1
Gross Alpha	2.0 ± 1.5	2		pCi/L	07/16/2010 1704 SH	SM 7110B
Gross Beta	ND	3.7		pCi/L	07/16/2010 1704 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	07/28/2010 1124 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/29/2010 1630 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/20/2010 120 SH	Ra-05
Lead 210 (Dissolved)	1.04 ± 0.51	1		pCi/L	07/27/2010 1317 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	07/23/2010 1631 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	07/27/2010 1756 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	07/26/2010 1712 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	07/30/2010 000 LJK	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	07/30/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	07/01/2010 1415 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	596	5		mg/L	06/25/2010 2006 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	26	5		mg/L	06/25/2010 2006 KO	SM 2320B
Chloride	1	1		mg/L	06/28/2010 1815 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	06/25/2010 2006 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/08/2010 1148 AS	EPA 353.2
Sulfate	95	1		mg/L	06/28/2010 1815 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron

Lacey Ketron, Project Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-001
Client Sample ID: SB Well 01
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 11:30:00 AM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	2	1		mg/L	06/25/2010 1440 DG	EPA 200.7
Magnesium	ND	1		mg/L	06/25/2010 1440 DG	EPA 200.7
Potassium	3	1		mg/L	06/25/2010 1440 DG	EPA 200.7
Sodium	272	1		mg/L	06/25/2010 1440 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.76	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Carbonate as CO ₃	0.86	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Chloride	0.03	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Fluoride	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Sulfate	1.97	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Calcium	0.10	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Magnesium	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Potassium	0.07	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Sodium	11.82	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.00	0		meq/L	07/01/2010 1430 KO	SM 1030E
Anion Sum	12.64	0		meq/L	07/01/2010 1430 KO	SM 1030E
Cation-Anion Balance	2.57	0		%	07/01/2010 1430 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-001
Client Sample ID: SB Well 01
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 11:30:00 AM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/25/2010 1440 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	06/25/2010 1603 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/25/2010 1603 MS	EPA 200.8
Boron	0.1	0.1		mg/L	06/25/2010 1440 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/25/2010 1603 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/25/2010 1440 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/25/2010 1603 MS	EPA 200.8
Iron	ND	0.05		mg/L	06/25/2010 1440 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/25/2010 1603 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/01/2010 831 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/25/2010 1603 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/25/2010 1440 DG	EPA 200.7
Selenium	ND	0.005		mg/L	06/25/2010 1603 MS	EPA 200.8
Uranium	0.002	0.001		mg/L	06/25/2010 1603 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/25/2010 1603 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/25/2010 1440 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	06/28/2010 1646 DG	EPA 200.7
Manganese	ND	0.02		mg/L	06/28/2010 1646 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

December 2010

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- 646 -



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010

Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-003
Client Sample ID: SB Well 02
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 1:30:00 PM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.78			s.u.	06/23/2010 1330	Field
Conductivity	789			µmhos/cm	06/23/2010 1330	Field
Dissolved Oxygen	0.82			mg/L	06/23/2010 1330	Field
Dissolved Oxygen (pct)	7.7			%	06/23/2010 1330	Field
Turbidity	1.75			NTU	06/23/2010 1330	Field
Temperature	10.8			°C	06/23/2010 1330	Field
General Parameters						
pH	8.1	0.1		s.u.	06/25/2010 2027 KO	SM 4500 H B
Electrical Conductivity	758	5		µmhos/cm	06/25/2010 2027 KO	SM 2510B
Total Dissolved Solids (180)	480	10		mg/L	06/25/2010 1405 MJH	SM 2540
Solids, Total Dissolved (Calc)	450	10		mg/L	07/01/2010 1430 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	390	5		mg/L	06/25/2010 2027 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/06/2010 1633 AS	EPA 350.1
Gross Alpha	4.1 ± 1.8	2		pCi/L	07/16/2010 1704 SH	SM 7110B
Gross Beta	12.3 ± 2.6	3.5		pCi/L	07/16/2010 1704 SH	SM 7110B
Radium 226 (Dissolved)	0.21 ± 0.09	0.2		pCi/L	07/28/2010 1124 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	07/29/2010 1837 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	07/20/2010 120 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	07/27/2010 1523 SH	OTW01
Lead 210 (Suspended)	1.11 ± 0.74	1	B	pCi/L	07/23/2010 1631 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	07/27/2010 2018 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	07/26/2010 1712 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	07/30/2010 000 LJK	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	07/30/2010 000 LJK	ACW10
Uranium Suspended	ND	0.001		mg/L	07/01/2010 1423 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	476	5		mg/L	06/25/2010 2027 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	06/25/2010 2027 KO	SM 2320B
Chloride	ND	1		mg/L	06/28/2010 1835 KO	EPA 300.0
Fluoride	ND	0.1		mg/L	06/25/2010 2027 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.3	0.1		mg/L	07/08/2010 1156 AS	EPA 353.2
Sulfate	40	1		mg/L	06/28/2010 1835 KO	EPA 300.0

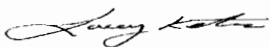
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-003
Client Sample ID: SB Well 02
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 1:30:00 PM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	35	1		mg/L	06/25/2010 1445 DG	EPA 200.7
Magnesium	23	1		mg/L	06/25/2010 1445 DG	EPA 200.7
Potassium	15	1		mg/L	06/25/2010 1445 DG	EPA 200.7
Sodium	106	1		mg/L	06/25/2010 1445 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.80	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Chloride	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Fluoride	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Sulfate	0.83	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Calcium	1.76	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Magnesium	1.87	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Potassium	0.39	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Sodium	4.58	0.01		meq/L	07/01/2010 1430 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	8.62	0		meq/L	07/01/2010 1430 KO	SM 1030E
Anion Sum	8.64	0		meq/L	07/01/2010 1430 KO	SM 1030E
Cation-Anion Balance	0.13	0		%	07/01/2010 1430 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Lacey Ketron, Project Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/5/2010
Report ID: S1006463001

Project: ROSS ISR
Lab ID: S1006463-003
Client Sample ID: SB Well 02
COC: 135254

Work Order: S1006463
Collection Date: 6/23/2010 1:30:00 PM
Date Received: 6/24/2010 8:06:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	06/25/2010 1445 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	06/25/2010 1610 MS	EPA 200.8
Barium	ND	0.5		mg/L	06/25/2010 1610 MS	EPA 200.8
Boron	0.1	0.1		mg/L	06/25/2010 1445 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	06/25/2010 1610 MS	EPA 200.8
Chromium	ND	0.01		mg/L	06/25/2010 1445 DG	EPA 200.7
Copper	ND	0.01		mg/L	06/25/2010 1610 MS	EPA 200.8
Iron	0.14	0.05		mg/L	06/25/2010 1445 DG	EPA 200.7
Lead	ND	0.02		mg/L	06/25/2010 1610 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/01/2010 838 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	06/25/2010 1610 MS	EPA 200.8
Nickel	ND	0.01		mg/L	06/25/2010 1445 DG	EPA 200.7
Selenium	ND	0.005		mg/L	06/25/2010 1610 MS	EPA 200.8
Uranium	0.005	0.001		mg/L	06/25/2010 1610 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	06/25/2010 1610 MS	EPA 200.8
Zinc	ND	0.01		mg/L	06/25/2010 1445 DG	EPA 200.7
Total Metals						
Iron	0.46	0.05		mg/L	06/28/2010 1650 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	06/28/2010 1650 DG	EPA 200.7

These results apply only to the samples tested.

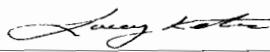
Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:


Lacey Ketron, Project Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005184003
(Replaces S1005184002)

Project: ROSS ISR
Lab ID: S1005184-001
Client Sample ID: TWO1
COC: 131148

Work Order: S1005184
Collection Date: 5/14/2010 10:30:00 AM
Date Received: 5/14/2010 4:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.33	s.u.			05/14/2010 1030	Field
Conductivity	1989	µm		hos/cm	05/14/2010 1030	Field
Dissolved Oxygen	1.29	mg		/L	05/14/2010 1030	Field
Dissolved Oxygen (pct)	10.9			%	05/14/2010 1030	Field
Turbidity	1.33	NT		U	05/14/2010 1030	Field
Temperature	8.7	°C			05/14/2010 1030	Field
General Parameters						
pH	8.4	0.1		s.u.	05/15/2010 1731 KO	SM 4500 H B
Electrical Conductivity	2150	5		µmhos/cm	07/12/2010 2123 KO	SM 2510B
Total Dissolved Solids (180)	1380	10		mg/L	05/17/2010 1035 MJH	SM 2540
Solids, Total Dissolved (Calc)	1250	10		mg/L	05/19/2010 1136 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	668	5		mg/L	05/15/2010 1731 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	05/28/2010 1151 AS	EPA 350.1
Gross Alpha	ND	2		pCi/L	05/26/2010 820 SH	SM 7110B
Gross Beta	5.8 ± 3.5	3.9		pCi/L	05/26/2010 820 SH	SM 7110B
Radium 226 (Dissolved)	0.32 ± 0.08	0.2		pCi/L	05/26/2010 1327 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	05/26/2010 2011 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 1109 LJK	OTW01
Lead 210 Suspended	ND	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 2213 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	05/25/2010 1950 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1453 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	798	5		mg/L	05/15/2010 1731 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	8	5		mg/L	05/15/2010 1731 KO	SM 2320B
Chloride	7	1		mg/L	05/15/2010 2008 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	05/15/2010 1731 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 917 AS	EPA 353.2
Sulfate	379	1		mg/L	05/15/2010 2008 KO	EPA 300.0

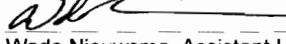
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005184003
(Replaces S1005184002)

Project: ROSS ISR
Lab ID: S1005184-001
Client Sample ID: TWO1
COC: 131148

Work Order: S1005184
Collection Date: 5/14/2010 10:30:00 AM
Date Received: 5/14/2010 4:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	9	1		mg/L	05/17/2010 1714 RS	EPA 200.7
Magnesium	4	1		mg/L	05/17/2010 1714 RS	EPA 200.7
Potassium	7	1		mg/L	05/17/2010 1714 RS	EPA 200.7
Sodium	438	1		mg/L	05/17/2010 1714 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	13.08	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Carbonate as CO ₃	0.27	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Chloride	0.18	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sulfate	7.89	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Calcium	0.45	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Magnesium	0.34	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Potassium	0.19	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sodium	19.03	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.03	0		meq/L	05/19/2010 1136 KO	SM 1030E
Anion Sum	21.50	0		meq/L	05/19/2010 1136 KO	SM 1030E
Cation-Anion Balance	3.54	0		%	05/19/2010 1136 KO	SM 1030E

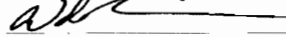
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/15/2010
Report ID: S1005184003
(Replaces S1005184002)

Project: ROSS ISR
Lab ID: S1005184-001
Client Sample ID: TWO1
COC: 131148

Work Order: S1005184
Collection Date: 5/14/2010 10:30:00 AM
Date Received: 5/14/2010 4:07:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1714 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1117 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1117 MS	EPA 200.8
Boron	0.5	0.1		mg/L	05/17/2010 1714 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1117 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1714 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1117 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/17/2010 1714 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1117 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 817 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1117 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1714 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1117 MS	EPA 200.8
Uranium	ND	0.001		mg/L	05/17/2010 1117 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1117 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	05/17/2010 1714 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	05/17/2010 1818 RS	EPA 200.7
Manganese	ND	0.02		mg/L	05/17/2010 1818 RS	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
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- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 3 of 6



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010

Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-001
Client Sample ID: TWO2
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 10:30:00 AM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.18	s.u.			05/13/2010 1030	Field
Conductivity	2880	µm		hos/cm	05/13/2010 1030	Field
Dissolved Oxygen	2.29	mg		/L	05/13/2010 1030	Field
Dissolved Oxygen (pct)	19.0			%	05/13/2010 1030	Field
Turbidity	0.89	NT		U	05/13/2010 1030	Field
Temperature	8.8	°C			05/13/2010 1030	Field
General Parameters						
pH	8.3	0.1		s.u.	05/15/2010 1803 KO	SM 4500 H B
Electrical Conductivity	1840	5		µmhos/cm	05/15/2010 1803 KO	SM 2510B
Total Dissolved Solids (180)	1500	10		mg/L	05/17/2010 1045 MJH	SM 2540
Solids, Total Dissolved (Calc)	1410	10		mg/L	05/19/2010 1136 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	613	5		mg/L	05/15/2010 1803 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	05/28/2010 1153 AS	EPA 350.1
Gross Alpha	ND	2		pCi/L	05/27/2010 642 SH	SM 7110B
Gross Beta	6.6 ± 4.7	5.10		pCi/L	05/27/2010 642 SH	SM 7110B
Radium 226 (Dissolved)	0.49 ± 0.09	0.2		pCi/L	05/26/2010 1327 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	05/26/2010 2011 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	05/24/2010 252 SH	Ra-05
Lead 210	ND	1		pCi/L	05/27/2010 1109 LJK	OTW01
Lead 210 Suspended	ND	1		pCi/L	05/27/2010 000 LJK	OTW01
Polonium 210	ND	1		pCi/L	05/22/2010 2213 SH	OTW01
Polonium 210 Suspended	ND	1		pCi/L	05/25/2010 1950 SH	OTW01
Thorium 230	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Thorium 230 Suspended	ND	0.2		pCi/L	06/03/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	05/18/2010 1502 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	742	5		mg/L	05/15/2010 1803 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	05/15/2010 1803 KO	SM 2320B
Chloride	11	1		mg/L	05/15/2010 2037 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	05/15/2010 1803 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	06/04/2010 919 AS	EPA 353.2
Sulfate	502	1		mg/L	05/15/2010 2037 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

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- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-001
Client Sample ID: TWO2
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 10:30:00 AM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	26	1		mg/L	05/17/2010 1719 RS	EPA 200.7
Magnesium	11	1		mg/L	05/17/2010 1719 RS	EPA 200.7
Potassium	11	1		mg/L	05/17/2010 1719 RS	EPA 200.7
Sodium	484	1		mg/L	05/17/2010 1719 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.16	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Chloride	0.30	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sulfate	10.45	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Calcium	1.28	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Magnesium	0.89	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Potassium	0.28	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Sodium	21.04	0.01		meq/L	05/19/2010 1136 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.51	0		meq/L	05/19/2010 1136 KO	SM 1030E
Anion Sum	23.04	0		meq/L	05/19/2010 1136 KO	SM 1030E
Cation-Anion Balance	1.00	0		%	05/19/2010 1136 KO	SM 1030E


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Qualifiers:

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RL - Reporting Limit

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- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 7/8/2010
Report ID: S1005185002
(Replaces S1005185001)

Project: ROSS ISR
Lab ID: S1005185-001
Client Sample ID: TWO2
COC: 131146

Work Order: S1005185
Collection Date: 5/13/2010 10:30:00 AM
Date Received: 5/14/2010 4:06:00 PM
Sampler: RF
Matrix: Water

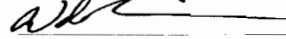
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	05/17/2010 1719 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	05/17/2010 1131 MS	EPA 200.8
Barium	ND	0.5		mg/L	05/17/2010 1131 MS	EPA 200.8
Boron	0.4	0.1		mg/L	05/17/2010 1719 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	05/17/2010 1131 MS	EPA 200.8
Chromium	ND	0.01		mg/L	05/17/2010 1719 RS	EPA 200.7
Copper	ND	0.01		mg/L	05/17/2010 1131 MS	EPA 200.8
Iron	ND	0.05		mg/L	05/17/2010 1719 RS	EPA 200.7
Lead	ND	0.02		mg/L	05/17/2010 1131 MS	EPA 200.8
Mercury	ND	0.001		mg/L	05/18/2010 821 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	05/17/2010 1131 MS	EPA 200.8
Nickel	ND	0.01		mg/L	05/17/2010 1719 RS	EPA 200.7
Selenium	ND	0.005		mg/L	05/17/2010 1131 MS	EPA 200.8
Uranium	ND	0.001		mg/L	05/17/2010 1131 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	05/17/2010 1131 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	05/17/2010 1719 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	05/17/2010 1830 RS	EPA 200.7
Manganese	0.03	0.02		mg/L	05/17/2010 1830 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 19XX18 Date: 7-9-10 Time: 1700

Landowner

Name: Merit Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Industrial
~~Stock~~ ✓

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.69

Cond. 3.08 MS

Temp. °C 13.6

Turbidity (ntu) 0.43

D.O. (mg/L) 3.992/38.3%

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 85°F

Comments: Water frozen - No color - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 22X-19 Date: 7-9-10 Time: 1600

Landowner

Name: Merit Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Industrial
Stock ✓

Picture #(s) _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.91

Cond. 1987 μ S

Temp. °C 13.1

Turbidity (ntu) 0.70

D.O. (mg/L) ~~0.70~~ 1.56 mg/L
14.5%

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 85°F

Comments: water foggy - no color - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS WELLOI Date: 7-22-10 Time: 1340

Landowner

Name: Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P132537W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.99

Cond. 3.31 uS

Temp. °C 12.0

Turbidity (ntu) 0.27

D.O. (mg/L) 2.08 mg/l / 19.0%

Water Level (ft): 152.8'

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 80°F

Comments: Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS WELL 03 Date: 7-22-10 Time: 1430

Landowner

Name: Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P619W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.89

Cond. 599 μ S

Temp. °C 11.6

Turbidity (ntu) 7.55

D.O. (mg/L) 2.89 mg/l / 26.4%

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 85°F

Comments: Water Clear - no odor - water
stopped pumping after 15 minutes (ran out
of water).

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: DW WELLOI Date: 7-22-10 Time: 1300

Landowner

Name: Wood

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. —

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.30

Cond. 3.16 μ S

Temp. °C 12.2

Turbidity (ntu) 5.13

D.O. (mg/L) 1.34 mg/L / 12.7%

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 80°F

Comments: Water slightly turbid (light brown) -
no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 03 Date: 7-21-10 Time: 1230

Landowner

Name: Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P7324P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.52

Cond. 1620 μ S

Temp. °C 11.0

Turbidity (ntu) 14.43

D.O. (mg/L) 1.05 / 9.4 %

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 80°F

Comments: Water slightly turbid (yellow/brown colored - NO odor)

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELLO4 Date: 7-21-10 Time: 1145

Landowner

Name: Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) —

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P7326P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.20

Cond. 1509 μ S

Temp. °C 10.1

Turbidity (ntu) 4.07

D.O. (mg/L) 0.92 / 8.2%

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: 80°F

Comments: Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 05 Date: 7-22-10 Time: 1200

Landowner

Name: Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P 7430P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.51

Cond. 1420 μ S

Temp. °C 11.1

Turbidity (ntu) 70.7

D.O. (mg/L) 4.72 mg/L / 43.5

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 80°F

Comments: Water rust colored - no odor -
well across New Haven road from
Strata field office

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P144030W Date: 8-24-10 Time: 1200

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr SE SW

SEC 23

TWN 53

RNG 68

Picture #(s) /

Stock _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P144030W

Location (Decimal Degrees)

Lat N 44.55941

Long W 104.99803

Elev. 4466

Water Quality

pH 7.44

Cond. 913 μ S

Temp. °C 14.8

Turbidity (ntu) 1.51

D.O. (mg/L) 1.21 / 12.0

Water Level (ft): 233.8' ? Sonic Probe

% Combustible Gas: —

Casing Height (ft): 2.20'

Ambient Air Temp: 75°F

Comments: Well on top of hill two miles from
D-Road (West) - water clear - no odor
New well outside of 2 kilometer area, but
Tony wanted me to sample to compare to well #
P21129P. Water piped to 2 stock tanks and
is running.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P21129P- P21128P Date: 8-24-10 Time: 1030

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr SWSW

SEC 24

TWN 53

RNG 68

Picture #(s) —

Stock ✓

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P21129P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.47

Cond. 1051 μ S

Temp. °C 11.5

Turbidity (ntu) 130

D.O. (mg/L) 2.89 / 26.6

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: 70°F

Comments: Well West of D-Road approx. 1 mile -
sample taken from frost-free hydrant at windmill. -
water turbid (light yellow/brown colored - no
smell.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50113W Date: 8-11-10 Time: 0950

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P50113W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.43

Cond. 1613 μ S

Temp. °C 8.3

Turbidity (ntu) 0.34

D.O. (mg/L) 1.86 / 15.4

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 85°F

Comments: Stock tank well on creek east of Stony and
Becky's house - water clear - no odor

** Field Dup.*

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50113W-FD Date: 8-11-10 Time: 1020

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P50113W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.46

Cond. 1627 μ S

Temp. °C 8.2

Turbidity (ntu) 0.24

D.O. (mg/L) 1.77 / 15.0

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Field Dup. - water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50883 W Date: 8-24-10 Time: 0945

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr NW NE

SEC 24

TWN 53

RNG 68

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: P50883 W

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.78

Cond. 658 μ S

Temp. °C 10.5

Turbidity (ntu) 19.48

D.O. (mg/L) 4.37 / 39.3

Water Level (ft): No Access

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: 70°F

Comments: Well located west of D-Road next
to h.m.r. - Submersible pump. - Water slightly
turbid (light yellow brown color) - No odor
If well is not running, Tony wants to be
around when turned on. That goes for all his
wells.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P71108W - Raw Date: 8-11-10 Time: 1130

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P71108W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.47

Cond. 1697

Temp. °C 11.5

Turbidity (ntu) 0.29

D.O. (mg/L) 1.94 / 18.0

Water Level (ft): -

% Combustible Gas: _____

Casing Height (ft): -

Ambient Air Temp: 90°F

Comments: Dallas and Anna's house well - took
sample from outside facet (untreated) water
clear - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P71177W P17177W Date: 8-11-10 Time: 1215

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P71177W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.34

Cond. 997 μ S

Temp. °C 9.5

Turbidity (ntu) 1.34

D.O. (mg/L) 4.00 / 35.2

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 90°F +

Comments: Stock tank well east of Dallas house
next to creek - water clear - No odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P84665W Date: 8-11-10 Time: 0900

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P84665W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.42

Cond. 983 μ S

Temp. °C 11.0

Turbidity (ntu) 0.88

D.O. (mg/L) 3.14 / 28.3

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 75°F

Comments: Wandwell N.E. of Stearns and Beck's
House - Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SB WELLOI Date: 8-11-10 Time: 0920

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.96

Cond. 1263 μ S

Temp. °C 11.2

Turbidity (ntu) 0.86

D.O. (mg/L) 1.71 / 15.7

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 80°F

Comments: Main well for Stormy and Becky's house
and ranch facilities. Water clear - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SBWELLOZ Date: 8-11-10 Time: 1300

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ✓

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.70

Cond. 843 μ S

Temp. °C 10.8

Turbidity (ntu) 1.23

D.O. (mg/L) 1.30 / 12.0

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 95°F

Comments: Stock tank well - most easterly - water
clear - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW WELL 03 Date: 7-28-10 Time: 0930

Landowner

Name: Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) 1, 2

Stock ☒

Domestic _____

SEO Permitted Facility Name: Wesley 2010

Permit No. P192896W

Location (Decimal Degrees)

Lat 44.58913

Long 104.96756

Elev. 4257

Water Quality

pH 8.91

Cond. 1381 μ S

Temp. °C 11.5

Turbidity (ntu) 0.51

D.O. (mg/L) 1.81 / 16.7%

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: TJ's new solar well

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: Tw01 Date: 7-21-10 Time: 1300

Landowner

Name: Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P 74302W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.05

Cond. 1810 μ S

Temp. °C 12.8

Turbidity (ntu) 0.88

D.O. (mg/L) 1.19 / 11.2%

Water Level (ft): 27.6'

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 80°F

Comments: T.J.'s house well -

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW02 Date: 7-21-10 Time: 1410

Landowner

Name: Wealey

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P103666W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.81

Cond. 1889 μ S

Temp. °C 13.6

Turbidity (ntu) 1.42

D.O. (mg/L) 0.78 / 7.5%

Water Level (ft): 16.0'

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: 80°F

Comments: Strata field office - water clear -
no odor.



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-002
Client Sample ID: 19XX-18
COC: 131153

Work Order: S1007140
Collection Date: 7/9/2010 5:00:00 PM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.69	s.u.			07/09/2010 1700	Field
Conductivity	3080	µm		hos/cm	07/09/2010 1700	Field
Dissolved Oxygen	3.99	mg		/L	07/09/2010 1700	Field
Dissolved Oxygen (pct)	38.3			%	07/09/2010 1700	Field
Turbidity	0.43	NT		U	07/09/2010 1700	Field
Temperature	13.6	°C			07/09/2010 1700	Field
General Parameters						
pH	8.6	0.1		s.u.	07/12/2010 1833 KO	SM 4500 H B
Electrical Conductivity	2370	5		µmhos/cm	07/12/2010 1833 KO	SM 2510B
Total Dissolved Solids (180)	1790	10		mg/L	07/12/2010 1655 AMB	SM 2540
Solids, Total Dissolved (Calc)	1550	10		mg/L	07/15/2010 1544 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	531	5		mg/L	07/12/2010 1833 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/23/2010 1431 AS	EPA 350.1
Gross Alpha	167.7 ± 9.4	3.3		pCi/L	08/10/2010 838 SH	SM 7110B
Gross Beta	54.0 ± 4.7	7		pCi/L	08/10/2010 838 SH	SM 7110B
Radium 226 (Dissolved)	39.4 ± 1.3	0.2		pCi/L	08/17/2010 2118 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.28 ± 0.08	0.2		pCi/L	08/13/2010 1719 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/16/2010 2232 SH	Ra-05
Lead 210 (Dissolved)	6.13 ± 0.73	1		pCi/L	08/15/2010 1637 SH	OTW01
Lead 210 (Suspended)	2.80 ± 0.47	1		pCi/L	08/17/2010 520 SH	OTW01
Polonium 210 (Dissolved)	6.40 ± 1.08	1		pCi/L	08/14/2010 1558 SH	OTW01
Polonium 210 (Suspended)	5.90 ± 0.79	1		pCi/L	08/17/2010 1236 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/16/2010 1914 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	610	5		mg/L	07/12/2010 1833 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	19	5		mg/L	07/12/2010 1833 KO	SM 2320B
Chloride	7	1		mg/L	07/12/2010 1814 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	07/12/2010 1833 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	07/23/2010 1209 AS	EPA 353.2
Sulfate	664	1		mg/L	07/12/2010 1814 KO	EPA 300.0


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010

Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-002
Client Sample ID: 19XX-18
COC: 131153

Work Order: S1007140
Collection Date: 7/9/2010 5:00:00 PM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	7	1		mg/L	07/12/2010 1753 DG	EPA 200.7
Magnesium	3	1		mg/L	07/12/2010 1753 DG	EPA 200.7
Potassium	4	1		mg/L	07/12/2010 1753 DG	EPA 200.7
Sodium	543	1		mg/L	07/12/2010 1753 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.00	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Carbonate as CO ₃	0.61	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Chloride	0.18	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Sulfate	13.83	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Calcium	0.36	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Magnesium	0.20	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Potassium	0.09	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Sodium	23.62	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.28	0		meq/L	07/15/2010 1544 KO	SM 1030E
Anion Sum	24.66	0		meq/L	07/15/2010 1544 KO	SM 1030E
Cation-Anion Balance	0.78	0		%	07/15/2010 1544 KO	SM 1030E

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 5 of 9



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-002
Client Sample ID: 19XX-18
COC: 131153

Work Order: S1007140
Collection Date: 7/9/2010 5:00:00 PM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/12/2010 1753 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/12/2010 1416 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/12/2010 1416 MS	EPA 200.8
Boron	0.4	0.1		mg/L	07/12/2010 1753 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/12/2010 1416 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/12/2010 1753 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/12/2010 1416 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/12/2010 1753 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/12/2010 1416 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/16/2010 455 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/12/2010 1416 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/12/2010 1753 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/12/2010 1416 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/12/2010 1416 MS	EPA 200.8
Uranium	0.087	0.001		mg/L	07/12/2010 1416 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/12/2010 1416 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/12/2010 1753 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/13/2010 1913 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/13/2010 1913 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-001
Client Sample ID: 22X-19
COC: 131153

Work Order: S1007140
Collection Date: 7/9/2010 4:00:00 PM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.91	s.u.			07/09/2010 1600	Field
Conductivity	1987	µm		hos/cm	07/09/2010 1600	Field
Dissolved Oxygen	1.56	mg		/L	07/09/2010 1600	Field
Dissolved Oxygen (pct)	14.5			%	07/09/2010 1600	Field
Turbidity	0.70	NT		U	07/09/2010 1600	Field
Temperature	13.1	°C			07/09/2010 1600	Field
General Parameters						
pH	8.6	0.1		s.u.	07/12/2010 1822 KO	SM 4500 H B
Electrical Conductivity	2070	5		µmhos/cm	07/12/2010 1822 KO	SM 2510B
Total Dissolved Solids (180)	1520	10		mg/L	07/12/2010 1650 AMB	SM 2540
Solids, Total Dissolved (Calc)	1350	10		mg/L	07/15/2010 1544 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	471	5		mg/L	07/12/2010 1822 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	07/23/2010 1430 AS	EPA 350.1
Gross Alpha	38.5 ± 4.8	3.7		pCi/L	08/10/2010 838 SH	SM 7110B
Gross Beta	12.3 ± 3.8	7		pCi/L	08/10/2010 838 SH	SM 7110B
Radium 226 (Dissolved)	3.08 ± 0.22	0.2		pCi/L	08/16/2010 1348 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 1719 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/16/2010 2232 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 1637 SH	OTW01
Lead 210 (Suspended)	1.46 ± 0.39	1		pCi/L	08/17/2010 520 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 1558 SH	OTW01
Polonium 210 (Suspended)	1.12 ± 0.37	1		pCi/L	08/17/2010 1236 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/08/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/16/2010 1911 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	547	5		mg/L	07/12/2010 1822 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	13	5		mg/L	07/12/2010 1822 KO	SM 2320B
Chloride	10	1		mg/L	07/12/2010 1803 KO	EPA 300.0
Fluoride	0.7	0.1		mg/L	07/12/2010 1822 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/23/2010 1208 AS	EPA 353.2
Sulfate	538	1		mg/L	07/12/2010 1803 KO	EPA 300.0

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-001
Client Sample ID: 22X-19
COC: 131153

Work Order: S1007140
Collection Date: 7/9/2010 4:00:00 PM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	6	1		mg/L	07/12/2010 1750 DG	EPA 200.7
Magnesium	2	1		mg/L	07/12/2010 1750 DG	EPA 200.7
Potassium	4	1		mg/L	07/12/2010 1750 DG	EPA 200.7
Sodium	507	1		mg/L	07/12/2010 1750 DG	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.97	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Carbonate as CO ₃	0.44	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Chloride	0.28	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Sulfate	11.20	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Calcium	0.30	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Magnesium	0.15	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Potassium	0.09	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Sodium	22.05	0.01		meq/L	07/15/2010 1544 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	22.60	0		meq/L	07/15/2010 1544 KO	SM 1030E
Anion Sum	20.94	0		meq/L	07/15/2010 1544 KO	SM 1030E
Cation-Anion Balance	3.81	0		%	07/15/2010 1544 KO	SM 1030E

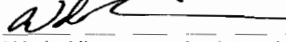
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 8/18/2010
Report ID: S1007140001

Project: ROSS
Lab ID: S1007140-001
Client Sample ID: 22X-19
COC: 131153

Work Order: S1007140
Collection Date: 7/9/2010 4:00:00 PM
Date Received: 7/12/2010 8:13:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/12/2010 1750 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	07/12/2010 1413 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/12/2010 1413 MS	EPA 200.8
Boron	0.4	0.1		mg/L	07/12/2010 1750 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	07/12/2010 1413 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/12/2010 1750 DG	EPA 200.7
Copper	ND	0.01		mg/L	07/12/2010 1413 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/12/2010 1750 DG	EPA 200.7
Lead	ND	0.02		mg/L	07/12/2010 1413 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/16/2010 449 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/12/2010 1413 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/12/2010 1750 DG	EPA 200.7
Selenium	ND	0.005		mg/L	07/12/2010 1413 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/12/2010 1413 MS	EPA 200.8
Uranium	0.021	0.001		mg/L	07/12/2010 1413 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/12/2010 1413 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/12/2010 1750 DG	EPA 200.7
Total Metals						
Iron	0.06	0.05		mg/L	07/13/2010 1908 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/13/2010 1908 DG	EPA 200.7

These results apply only to the samples tested.

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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 3 of 9



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-005
Client Sample ID: CS Well01
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 1:40:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.99	s.u.			07/22/2010 1340	Field
Conductivity	3310	µm		hos/cm	07/22/2010 1340	Field
Dissolved Oxygen	2.08	mg		/L	07/22/2010 1340	Field
Dissolved Oxygen (pct)	19.0			%	07/22/2010 1340	Field
Turbidity	0.27	NT		U	07/22/2010 1340	Field
Temperature	12.0	°C			07/22/2010 1340	Field
General Parameters						
pH	8.3	0.1		s.u.	07/24/2010 033 LJK	SM 4500 H B
Electrical Conductivity	2600	5		µmhos/cm	07/24/2010 033 LJK	SM 2510B
Total Dissolved Solids (180)	1920	10		mg/L	07/23/2010 1030 MJH	SM 2540
Solids, Total Dissolved (Calc)	1770	10		mg/L	07/27/2010 907 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	642	5		mg/L	07/24/2010 033 LJK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2010 1112 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	772	5		mg/L	07/24/2010 033 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	5	5		mg/L	07/24/2010 033 LJK	SM 2320B
Chloride	7	1		mg/L	07/26/2010 2055 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	07/26/2010 1708 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.9	0.1		mg/L	07/30/2010 1531 AS	EPA 353.2
Sulfate	723	1		mg/L	07/26/2010 2055 KO	EPA 300.0
Cations						
Calcium	43	1		mg/L	07/23/2010 1814 RS	EPA 200.7
Magnesium	33	1		mg/L	07/23/2010 1814 RS	EPA 200.7
Potassium	12	1		mg/L	07/23/2010 1814 RS	EPA 200.7
Sodium	570	1		mg/L	07/23/2010 1814 RS	EPA 200.7

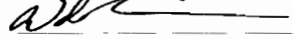
These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-005
Client Sample ID: CS Well01
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 1:40:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.65	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Carbonate as CO ₃	0.17	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Chloride	0.19	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sulfate	15.05	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Calcium	2.12	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Magnesium	2.74	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Potassium	0.29	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sodium	24.79	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	29.96	0		meq/L	07/27/2010 907 KO	SM 1030E
Anion Sum	28.09	0		meq/L	07/27/2010 907 KO	SM 1030E
Cation-Anion Balance	3.22	0		%	07/27/2010 907 KO	SM 1030E
Radio Chemistry						
Gross Alpha	14.6 ± 3.2	3.3		pCi/L	08/22/2010 1038 SH	SM 7110B
Gross Beta	13.2 ± 4.0	6.6		pCi/L	08/22/2010 1038 SH	SM 7110B
Radium 226 (Dissolved)	0.49 ± 0.09	0.2		pCi/L	08/29/2010 2024 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2112 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/27/2010 319 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2106 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 1941 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1523 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1249 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1835 MS	EPA 200.8

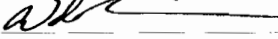
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-005
Client Sample ID: CS Well01
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 1:40:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1814 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1337 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1337 MS	EPA 200.8
Boron	0.4	0.1		mg/L	07/23/2010 1814 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1337 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1814 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1337 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/23/2010 1814 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1337 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 841 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1337 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1814 RS	EPA 200.7
Selenium	0.009	0.005		mg/L	07/23/2010 1337 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1337 MS	EPA 200.8
Uranium	0.020	0.001		mg/L	07/23/2010 1337 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1337 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/23/2010 1814 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	07/26/2010 2049 DG	EPA 200.7
Manganese	ND	0.02		mg/L	07/26/2010 2049 DG	EPA 200.7

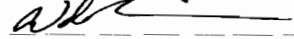
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-006
Client Sample ID: CS Well03
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 2:30:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.89	s.u.			07/22/2010 1430	Field
Conductivity	599	µm		hos/cm	07/22/2010 1430	Field
Dissolved Oxygen	2.89	mg		/L	07/22/2010 1430	Field
Dissolved Oxygen (pct)	26.4			%	07/22/2010 1430	Field
Turbidity	7.55	NT		U	07/22/2010 1430	Field
Temperature	11.6	°C			07/22/2010 1430	Field
General Parameters						
pH	8.1	0.1		s.u.	07/24/2010 042 LJK	SM 4500 H B
Electrical Conductivity	617	5		µmhos/cm	07/24/2010 042 LJK	SM 2510B
Total Dissolved Solids (180)	380	10		mg/L	07/23/2010 1040 MJH	SM 2540
Solids, Total Dissolved (Calc)	360	10		mg/L	07/27/2010 907 KO	SM 1030E
Alkalinity, Total (As CaCO3)	324	5		mg/L	07/24/2010 042 LJK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2010 1113 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	395	5		mg/L	07/24/2010 042 LJK	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	07/24/2010 042 LJK	SM 2320B
Chloride	3	1		mg/L	07/26/2010 2106 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	07/26/2010 1711 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1532 AS	EPA 353.2
Sulfate	28	1		mg/L	07/26/2010 2106 KO	EPA 300.0
Cations						
Calcium	37	1		mg/L	07/23/2010 1824 RS	EPA 200.7
Magnesium	19	1		mg/L	07/23/2010 1824 RS	EPA 200.7
Potassium	9	1		mg/L	07/23/2010 1824 RS	EPA 200.7
Sodium	74	1		mg/L	07/23/2010 1824 RS	EPA 200.7

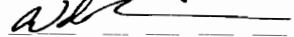
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-006
Client Sample ID: CS Well03
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 2:30:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.47	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Chloride	0.07	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Fluoride	ND	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sulfate	0.57	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Calcium	1.84	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Magnesium	1.59	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Potassium	0.22	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sodium	3.22	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	6.88	0		meq/L	07/27/2010 907 KO	SM 1030E
Anion Sum	7.13	0		meq/L	07/27/2010 907 KO	SM 1030E
Cation-Anion Balance	1.74	0		%	07/27/2010 907 KO	SM 1030E
Radio Chemistry						
Gross Alpha	5.53 ± 1.07	2		pCi/L	08/22/2010 1038 SH	SM 7110B
Gross Beta	7.36 ± 1.13	3		pCi/L	08/22/2010 1038 SH	SM 7110B
Radium 226 (Dissolved)	0.34 ± 0.08	0.2		pCi/L	08/29/2010 2024 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2112 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/27/2010 319 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2312 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 2149 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1745 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1549 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1837 MS	EPA 200.8

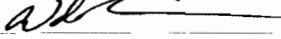
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Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-006
Client Sample ID: CS Well03
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 2:30:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1824 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1340 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1340 MS	EPA 200.8
Boron	ND	0.1		mg/L	07/23/2010 1824 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1340 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1824 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1340 MS	EPA 200.8
Iron	0.83	0.05		mg/L	07/23/2010 1824 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1340 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 843 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1340 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1824 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/23/2010 1340 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1340 MS	EPA 200.8
Uranium	0.001	0.001		mg/L	07/23/2010 1340 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1340 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	07/23/2010 1824 RS	EPA 200.7
Total Metals						
Iron	1.51	0.05		mg/L	07/26/2010 2054 DG	EPA 200.7
Manganese	0.32	0.02		mg/L	07/26/2010 2054 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-004
Client Sample ID: DW Well01
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 1:00:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.30	s.u.			07/22/2010 1300	Field
Conductivity	3160	µm		hos/cm	07/22/2010 1300	Field
Dissolved Oxygen	1.34	mg		/L	07/22/2010 1300	Field
Dissolved Oxygen (pct)	12.7			%	07/22/2010 1300	Field
Turbidity	5.13	NT		U	07/22/2010 1300	Field
Temperature	12.2	°C			07/22/2010 1300	Field
General Parameters						
pH	8.5	0.1		s.u.	07/24/2010 022 LJK	SM 4500 H B
Electrical Conductivity	2540	5		µmhos/cm	07/24/2010 022 LJK	SM 2510B
Total Dissolved Solids (180)	1820	10		mg/L	07/23/2010 1025 MJH	SM 2540
Solids, Total Dissolved (Calc)	1670	10		mg/L	07/27/2010 907 KO	SM 1030E
Alkalinity, Total (As CaCO3)	593	5		mg/L	07/24/2010 022 LJK	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	08/04/2010 1111 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	697	5		mg/L	07/24/2010 022 LJK	SM 2320B
Alkalinity, Carbonate as CO3	13	5		mg/L	07/24/2010 022 LJK	SM 2320B
Chloride	7	1		mg/L	07/26/2010 2044 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	07/26/2010 1704 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1530 AS	EPA 353.2
Sulfate	691	1		mg/L	07/26/2010 2044 KO	EPA 300.0
Cations						
Calcium	17	1		mg/L	07/23/2010 1812 RS	EPA 200.7
Magnesium	6	1		mg/L	07/23/2010 1812 RS	EPA 200.7
Potassium	11	1		mg/L	07/23/2010 1812 RS	EPA 200.7
Sodium	582	1		mg/L	07/23/2010 1812 RS	EPA 200.7

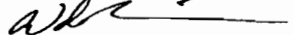
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-004
Client Sample ID: DW Well01
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 1:00:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.42	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Carbonate as CO ₃	0.44	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Chloride	0.19	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sulfate	14.37	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Calcium	0.82	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Magnesium	0.49	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Potassium	0.28	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sodium	25.31	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	26.91	0		meq/L	07/27/2010 907 KO	SM 1030E
Anion Sum	26.47	0		meq/L	07/27/2010 907 KO	SM 1030E
Cation-Anion Balance	0.82	0		%	07/27/2010 907 KO	SM 1030E
Radio Chemistry						
Gross Alpha	12.6 ± 3.0	3.3		pCi/L	08/22/2010 1038 SH	SM 7110B
Gross Beta	7.71 ± 4.12	7		pCi/L	08/22/2010 1038 SH	SM 7110B
Radium 226 (Dissolved)	0.21 ± 0.07	0.2		pCi/L	08/29/2010 2024 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2112 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/26/2010 2301 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2106 SH	OTW01
Lead 210 (Suspended)	1.21 ± 0.38	1		pCi/L	08/21/2010 1941 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1523 SH	OTW01
Polonium 210 (Suspended)	8.91 ± 1.04	1		pCi/L	08/24/2010 1249 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1832 MS	EPA 200.8

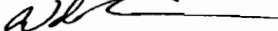
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-004
Client Sample ID: DW Well01
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 1:00:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1812 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1333 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1333 MS	EPA 200.8
Boron	0.5	0.1		mg/L	07/23/2010 1812 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1333 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1812 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1333 MS	EPA 200.8
Iron	0.88	0.05		mg/L	07/23/2010 1812 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1333 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 839 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1333 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1812 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/23/2010 1333 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1333 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/23/2010 1333 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1333 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/23/2010 1812 RS	EPA 200.7
Total Metals						
Iron	1.73	0.05		mg/L	07/26/2010 2044 DG	EPA 200.7
Manganese	0.04	0.02		mg/L	07/26/2010 2044 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-002
Client Sample ID: HBWELL03
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 12:30:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.52	s.u.			07/21/2010 1230	Field
Conductivity	1620	µm		hos/cm	07/21/2010 1230	Field
Dissolved Oxygen	1.05	mg		/L	07/21/2010 1230	Field
Dissolved Oxygen (pct)	9.4			%	07/21/2010 1230	Field
Turbidity	14.43	NT		U	07/21/2010 1230	Field
Temperature	11.0	°C			07/21/2010 1230	Field
General Parameters						
pH	8.1	0.1		s.u.	07/23/2010 2130 LJK	SM 4500 H B
Electrical Conductivity	1800	5		µmhos/cm	07/23/2010 2130 LJK	SM 2510B
Total Dissolved Solids (180)	1310	10		mg/L	07/22/2010 1215 MJH	SM 2540
Solids, Total Dissolved (Calc)	1190	10		mg/L	07/29/2010 753 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	524	5		mg/L	07/23/2010 2130 LJK	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	07/30/2010 1608 AS	EPA 350.1
Gross Alpha	8.73 ± 2.64	3.2		pCi/L	08/21/2010 1206 SH	SM 7110B
Gross Beta	17.3 ± 3.8	6.8		pCi/L	08/21/2010 1206 SH	SM 7110B
Radium 226 (Dissolved)	0.77 ± 0.10	0.2		pCi/L	08/16/2010 1825 SH	SM 7500-Ra B
Radium 226 (Suspended)	291.2 ± 2.3	0.2		pCi/L	08/13/2010 2222 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/23/2010 2212 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 2316 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 2028 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/09/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/26/2010 1713 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	640	5		mg/L	07/23/2010 2130 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	07/23/2010 2130 LJK	SM 2320B
Chloride	11	1		mg/L	07/26/2010 1557 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	07/26/2010 1522 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1500 AS	EPA 353.2
Sulfate	437	1		mg/L	07/26/2010 1557 KO	EPA 300.0

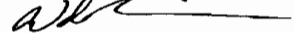
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-002
Client Sample ID: HBWELL03
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 12:30:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	91	1		mg/L	07/22/2010 1332 RS	EPA 200.7
Magnesium	52	1		mg/L	07/22/2010 1332 RS	EPA 200.7
Potassium	17	1		mg/L	07/22/2010 1332 RS	EPA 200.7
Sodium	267	1		mg/L	07/22/2010 1332 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.48	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Chloride	0.29	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sulfate	9.09	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Calcium	4.54	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Magnesium	4.24	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Potassium	0.43	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sodium	11.61	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.83	0		meq/L	07/29/2010 753 KO	SM 1030E
Anion Sum	19.89	0		meq/L	07/29/2010 753 KO	SM 1030E
Cation-Anion Balance	2.32	0		%	07/29/2010 753 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-002
Client Sample ID: HBWELL03
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 12:30:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1859 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/22/2010 1112 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/22/2010 1112 MS	EPA 200.8
Boron	0.2	0.1		mg/L	07/23/2010 1859 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/22/2010 1112 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1859 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/22/2010 1112 MS	EPA 200.8
Iron	3.94	0.05		mg/L	07/23/2010 1859 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/22/2010 1112 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/23/2010 908 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/22/2010 1112 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1859 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/22/2010 1112 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/22/2010 1112 MS	EPA 200.8
Uranium	0.004	0.001		mg/L	07/22/2010 1112 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/22/2010 1112 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/23/2010 1859 RS	EPA 200.7
Total Metals						
Iron	7.22	0.05		mg/L	07/23/2010 1916 RS	EPA 200.7
Manganese	0.90	0.02		mg/L	07/23/2010 1916 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-001
Client Sample ID: HBWELL04
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 11:45:00 AM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.20	s.u.			07/21/2010 1145	Field
Conductivity	1509	µm		hos/cm	07/21/2010 1145	Field
Dissolved Oxygen	0.92	mg		/L	07/21/2010 1145	Field
Dissolved Oxygen (pct)	8.2			%	07/21/2010 1145	Field
Turbidity	4.07	NT		U	07/21/2010 1145	Field
Temperature	10.1	°C			07/21/2010 1145	Field
General Parameters						
pH	7.9	0.1		s.u.	07/23/2010 2120 LJK	SM 4500 H B
Electrical Conductivity	1700	5		µmhos/cm	07/23/2010 2120 LJK	SM 2510B
Total Dissolved Solids (180)	1370	10		mg/L	07/22/2010 1210 MJH	SM 2540
Solids, Total Dissolved (Calc)	1210	10		mg/L	07/29/2010 753 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	364	5		mg/L	07/23/2010 2120 LJK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	07/30/2010 1607 AS	EPA 350.1
Gross Alpha	23.0 ± 3.7	3.1		pCi/L	08/21/2010 1206 SH	SM 7110B
Gross Beta	17.4 ± 3.9	7		pCi/L	08/21/2010 1206 SH	SM 7110B
Radium 226 (Dissolved)	0.52 ± 0.09	0.2		pCi/L	08/16/2010 1825 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.59 ± 0.10	0.2		pCi/L	08/13/2010 2222 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/23/2010 2212 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 2316 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 2028 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/26/2010 1711 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	444	5		mg/L	07/23/2010 2120 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	07/23/2010 2120 LJK	SM 2320B
Chloride	12	1		mg/L	07/26/2010 1546 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	07/26/2010 1518 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.9	0.1		mg/L	07/30/2010 1444 AS	EPA 353.2
Sulfate	583	1		mg/L	07/26/2010 1546 KO	EPA 300.0

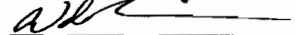
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-001
Client Sample ID: HBWELL04
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 11:45:00 AM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	199	1		mg/L	07/22/2010 1329 RS	EPA 200.7
Magnesium	64	1		mg/L	07/22/2010 1329 RS	EPA 200.7
Potassium	7	1		mg/L	07/22/2010 1329 RS	EPA 200.7
Sodium	123	1		mg/L	07/22/2010 1329 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.28	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Chloride	0.32	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Fluoride	ND	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sulfate	12.13	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Calcium	9.95	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Magnesium	5.25	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Potassium	0.17	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sodium	5.36	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	20.74	0		meq/L	07/29/2010 753 KO	SM 1030E
Anion Sum	19.75	0		meq/L	07/29/2010 753 KO	SM 1030E
Cation-Anion Balance	2.45	0		%	07/29/2010 753 KO	SM 1030E

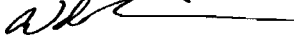
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-001
Client Sample ID: HBWELL04
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 11:45:00 AM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1856 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/22/2010 1108 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/22/2010 1108 MS	EPA 200.8
Boron	ND	0.1		mg/L	07/23/2010 1856 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/22/2010 1108 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1856 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/22/2010 1108 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/23/2010 1856 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/22/2010 1108 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/23/2010 859 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/22/2010 1108 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1856 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/22/2010 1108 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/22/2010 1108 MS	EPA 200.8
Uranium	0.033	0.001		mg/L	07/22/2010 1108 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/22/2010 1108 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	07/23/2010 1856 RS	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	07/23/2010 1914 RS	EPA 200.7
Manganese	0.07	0.02		mg/L	07/23/2010 1914 RS	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-003
Client Sample ID: HB Well 05
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 12:00:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.51	s.u.			07/22/2010 1200	Field
Conductivity	1420	µm		hos/cm	07/22/2010 1200	Field
Dissolved Oxygen	4.72	mg		/L	07/22/2010 1200	Field
Dissolved Oxygen (pct)	43.5			%	07/22/2010 1200	Field
Turbidity	70.7	NT		U	07/22/2010 1200	Field
Temperature	11.1	°C			07/22/2010 1200	Field
General Parameters						
pH	8.2	0.1		s.u.	07/24/2010 012 LJK	SM 4500 H B
Electrical Conductivity	1610	5		µmhos/cm	07/24/2010 012 LJK	SM 2510B
Total Dissolved Solids (180)	1160	10		mg/L	07/23/2010 1020 MJH	SM 2540
Solids, Total Dissolved (Calc)	1080	10		mg/L	07/27/2010 907 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	521	5		mg/L	07/24/2010 012 LJK	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2010 1110 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	635	5		mg/L	07/24/2010 012 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	07/24/2010 012 LJK	SM 2320B
Chloride	4	1		mg/L	07/26/2010 2034 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	07/26/2010 1701 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1529 AS	EPA 353.2
Sulfate	378	1		mg/L	07/26/2010 2034 KO	EPA 300.0
Cations						
Calcium	90	1		mg/L	07/23/2010 1804 RS	EPA 200.7
Magnesium	38	1		mg/L	07/23/2010 1804 RS	EPA 200.7
Potassium	8	1		mg/L	07/23/2010 1804 RS	EPA 200.7
Sodium	246	1		mg/L	07/23/2010 1804 RS	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-003
Client Sample ID: HB Well 05
COC: 128480


Work Order: S1007330
Collection Date: 7/22/2010 12:00:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.41	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Chloride	0.10	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sulfate	7.86	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Calcium	4.47	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Magnesium	3.15	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Potassium	0.20	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Sodium	10.68	0.01		meq/L	07/27/2010 907 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.51	0		meq/L	07/27/2010 907 KO	SM 1030E
Anion Sum	18.39	0		meq/L	07/27/2010 907 KO	SM 1030E
Cation-Anion Balance	0.33	0		%	07/27/2010 907 KO	SM 1030E
Radio Chemistry						
Gross Alpha	11.3 ± 2.9	3.2		pCi/L	08/22/2010 1038 SH	SM 7110B
Gross Beta	8.77 ± 4.10	6.9		pCi/L	08/22/2010 1038 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/29/2010 2024 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2112 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/26/2010 2301 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2106 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 1941 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1523 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1249 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 VN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 VN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1830 MS	EPA 200.8

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/1/2010
Report ID: S1007330001

Project: ROSS
Lab ID: S1007330-003
Client Sample ID: HB Well 05
COC: 128480

Work Order: S1007330
Collection Date: 7/22/2010 12:00:00 PM
Date Received: 7/23/2010 8:50:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1804 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/23/2010 1329 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/23/2010 1329 MS	EPA 200.8
Boron	0.2	0.1		mg/L	07/23/2010 1804 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/23/2010 1329 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1804 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/23/2010 1329 MS	EPA 200.8
Iron	0.82	0.05		mg/L	07/23/2010 1804 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/23/2010 1329 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/27/2010 838 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/23/2010 1329 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1804 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/23/2010 1329 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/23/2010 1329 MS	EPA 200.8
Uranium	0.013	0.001		mg/L	07/23/2010 1329 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/23/2010 1329 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/23/2010 1804 RS	EPA 200.7
Total Metals						
Iron	8.39	0.05		mg/L	07/26/2010 2042 DG	EPA 200.7
Manganese	0.17	0.02		mg/L	07/26/2010 2042 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-003
Client Sample ID: P144030W
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 12:00:00 PM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.44		s.u.		08/24/2010 1200	Field
Conductivity	913		µmhos/cm		08/24/2010 1200	Field
Dissolved Oxygen	1.21		mg/L		08/24/2010 1200	Field
Dissolved Oxygen (pct)	12.0			%	08/24/2010 1200	Field
Turbidity	1.51		NT	U	08/24/2010 1200	Field
Temperature	14.8		°C		08/24/2010 1200	Field
General Parameters						
pH	8.0	0.1		s.u.	08/26/2010 1751 KO	SM 4500 H B
Electrical Conductivity	846	5		µmhos/cm	08/26/2010 1751 KO	SM 2510B
Total Dissolved Solids (180)	520	10		mg/L	08/27/2010 1130 AMB	SM 2540
Solids, Total Dissolved (Calc)	530	10		mg/L	09/03/2010 757 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	443	5		mg/L	08/26/2010 1751 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/08/2010 948 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	541	5		mg/L	08/26/2010 1751 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/26/2010 1751 KO	SM 2320B
Chloride	1	1		mg/L	08/26/2010 1716 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/26/2010 1751 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/31/2010 1748 AS	EPA 353.2
Sulfate	56	1		mg/L	08/26/2010 1716 KO	EPA 300.0
Cations						
Calcium	49	1		mg/L	09/02/2010 1305 DG	EPA 200.7
Magnesium	25	1		mg/L	09/02/2010 1305 DG	EPA 200.7
Potassium	16	1		mg/L	09/02/2010 1305 DG	EPA 200.7
Sodium	113	1		mg/L	09/02/2010 1305 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-003
Client Sample ID: P144030W
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 12:00:00 PM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.86	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Chloride	0.03	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Sulfate	1.17	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Calcium	2.44	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Magnesium	2.05	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Potassium	0.41	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Sodium	4.93	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	9.84	0		meq/L	09/03/2010 757 KO	SM 1030E
Anion Sum	10.07	0		meq/L	09/03/2010 757 KO	SM 1030E
Cation-Anion Balance	1.13	0		%	09/03/2010 757 KO	SM 1030E
Radio Chemistry						
Gross Alpha	23.9 ± 2.6	2		pCi/L	10/02/2010 2207 SH	SM 7110B
Gross Beta	23.8 ± 2.2	3		pCi/L	10/02/2010 2207 SH	SM 7110B
Radium 226 (Dissolved)	0.8 ± 0.2	0.2		pCi/L	10/05/2010 834 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/10/2010 2120 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/23/2010 1443 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/23/2010 1443 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2		pCi/L	10/20/2010 1407 WN	ACW10
Thorium 230 (Suspended)	ND	0.2		pCi/L	10/20/2010 1407 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	09/08/2010 1143 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-003
Client Sample ID: P144030W
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 12:00:00 PM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/30/2010 1045 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/26/2010 1701 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/26/2010 1701 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/30/2010 1045 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/26/2010 1701 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/30/2010 1045 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/26/2010 1701 MS	EPA 200.8
Iron	0.08	0.05		mg/L	08/30/2010 1045 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/26/2010 1701 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/31/2010 811 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/26/2010 1701 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/30/2010 1045 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/26/2010 1701 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/26/2010 1701 MS	EPA 200.8
Uranium	0.024	0.001		mg/L	08/26/2010 1701 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/26/2010 1701 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/30/2010 1045 DG	EPA 200.7
Total Metals						
Iron	0.13	0.05		mg/L	08/30/2010 1708 DG	EPA 200.7
Manganese	0.08	0.02		mg/L	08/30/2010 1708 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-002
Client Sample ID: P21128P
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 10:30:00 AM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.47	s.u.			08/24/2010 1030	Field
Conductivity	1051	µmhos/cm			08/24/2010 1030	Field
Dissolved Oxygen	2.89	mg/L			08/24/2010 1030	Field
Dissolved Oxygen (pct)	26.6			%	08/24/2010 1030	Field
Turbidity	130	NT		U	08/24/2010 1030	Field
Temperature	11.5	°C			08/24/2010 1030	Field
General Parameters						
pH	8.4	0.1		s.u.	08/26/2010 1741 KO	SM 4500 H B
Electrical Conductivity	956	5		µmhos/cm	08/26/2010 1741 KO	SM 2510B
Total Dissolved Solids (180)	620	10		mg/L	08/27/2010 1125 AMB	SM 2540
Solids, Total Dissolved (Calc)	600	10		mg/L	09/03/2010 757 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	438	5		mg/L	08/26/2010 1741 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/08/2010 947 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	514	5		mg/L	08/26/2010 1741 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	10	5		mg/L	08/26/2010 1741 KO	SM 2320B
Chloride	2	1		mg/L	08/26/2010 1706 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/26/2010 1741 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.1	0.1		mg/L	08/31/2010 1747 AS	EPA 353.2
Sulfate	91	1		mg/L	08/26/2010 1706 KO	EPA 300.0
Cations						
Calcium	13	1		mg/L	08/30/2010 1042 DG	EPA 200.7
Magnesium	7	1		mg/L	08/30/2010 1042 DG	EPA 200.7
Potassium	15	1		mg/L	08/30/2010 1042 DG	EPA 200.7
Sodium	207	1		mg/L	08/30/2010 1042 DG	EPA 200.7

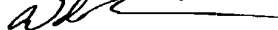
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-002
Client Sample ID: P21128P
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 10:30:00 AM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.43	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Carbonate as CO ₃	0.33	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Chloride	0.06	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Nitrate + Nitrite as N	0.08	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Sulfate	1.88	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Calcium	0.64	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Magnesium	0.59	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Potassium	0.38	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Sodium	8.99	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.62	0		meq/L	09/03/2010 757 KO	SM 1030E
Anion Sum	10.80	0		meq/L	09/03/2010 757 KO	SM 1030E
Cation-Anion Balance	0.86	0		%	09/03/2010 757 KO	SM 1030E
Radio Chemistry						
Gross Alpha	178 ± 7.6	2		pCi/L	10/02/2010 2207 SH	SM 7110B
Gross Beta	128 ± 3.8	3		pCi/L	10/02/2010 2207 SH	SM 7110B
Radium 226 (Dissolved)	0.3 ± 0.1	0.2		pCi/L	10/05/2010 834 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.7 ± 0.1	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/10/2010 2120 SH	Ra-05
Lead 210 (Dissolved)	17.4 ± 1.6	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	1.8 ± 0.6	1		pCi/L	09/23/2010 1443 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/23/2010 1443 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2		pCi/L	10/20/2010 1407 WN	ACW10
Thorium 230 (Suspended)	0.209±0.042	0.2		pCi/L	10/20/2010 1407 WN	ACW10
Uranium Suspended	0.002	0.001		mg/L	09/08/2010 1141 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-002
Client Sample ID: P21128P
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 10:30:00 AM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/30/2010 1042 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/26/2010 1657 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/26/2010 1657 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/30/2010 1042 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/26/2010 1657 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/30/2010 1042 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/26/2010 1657 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/30/2010 1042 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/26/2010 1657 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/31/2010 810 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/26/2010 1657 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/30/2010 1042 DG	EPA 200.7
Selenium	0.103	0.005		mg/L	08/26/2010 1657 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/26/2010 1657 MS	EPA 200.8
Uranium	0.271	0.001		mg/L	08/26/2010 1657 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/26/2010 1657 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/30/2010 1042 DG	EPA 200.7
Total Metals						
Iron	16.5	0.05		mg/L	08/30/2010 1656 DG	EPA 200.7
Manganese	0.51	0.02		mg/L	08/30/2010 1656 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-005
Client Sample ID: P50113W
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:50:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.43	s.u.			08/11/2010 950	Field
Conductivity	1613	µm		hos/cm	08/11/2010 950	Field
Dissolved Oxygen	1.86	mg		/L	08/11/2010 950	Field
Dissolved Oxygen (pct)	15.4			%	08/11/2010 950	Field
Turbidity	0.34	NT		U	08/11/2010 950	Field
Temperature	8.3	°C			08/11/2010 950	Field
General Parameters						
pH	8.1	0.1		s.u.	08/13/2010 2032 KO	SM 4500 H B
Electrical Conductivity	1500	5		µmhos/cm	08/13/2010 2032 KO	SM 2510B
Total Dissolved Solids (180)	1060	10		mg/L	08/12/2010 1730 AMB	SM 2540
Solids, Total Dissolved (Calc)	870	10		mg/L	08/25/2010 744 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	08/16/2010 1100 AMB	SM 2540
Alkalinity, Total (As CaCO ₃)	536	5		mg/L	08/13/2010 2032 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	08/25/2010 1510 AS	EPA 350.1
Turbidity	0.2	0.1		NTU	08/12/2010 1420 KB	SM 2130
Anions						
Alkalinity, Bicarbonate as HCO ₃	654	5		mg/L	08/13/2010 2032 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/13/2010 2032 KO	SM 2320B
Chloride	36	1		mg/L	08/16/2010 1444 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/13/2010 2032 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	23.9	0.1		mg/L	08/20/2010 1523 AS	EPA 353.2
Sulfate	172	1		mg/L	08/16/2010 1444 KO	EPA 300.0
Cations						
Calcium	97	1		mg/L	08/12/2010 1734 DG	EPA 200.7
Magnesium	52	1		mg/L	08/12/2010 1734 DG	EPA 200.7
Potassium	6	1		mg/L	08/12/2010 1734 DG	EPA 200.7
Sodium	162	1		mg/L	08/12/2010 1734 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-005
Client Sample ID: P50113W
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:50:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.71	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Chloride	1.02	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Nitrate + Nitrite as N	1.70	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sulfate	3.57	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Calcium	4.83	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Magnesium	4.25	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Potassium	0.15	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sodium	7.03	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.27	0		meq/L	08/25/2010 744 KO	SM 1030E
Anion Sum	17.03	0		meq/L	08/25/2010 744 KO	SM 1030E
Cation-Anion Balance	2.26	0		%	08/25/2010 744 KO	SM 1030E
Radio Chemistry						
Gross Alpha	78.6 ± 6.5	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	40.1 ± 4.3	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	0.5 ± 0.1	0.2		pCi/L	10/12/2010 946 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/21/2010 2313 SH	Ra-05
Lead 210 (Dissolved)	2.1 ± 0.5	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/23/2010 1102 MS	EPA 200.8

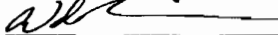
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-005
Client Sample ID: P50113W
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:50:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1734 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1438 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1438 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/12/2010 1734 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1438 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1734 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1438 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1734 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1438 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 945 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1438 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1734 DG	EPA 200.7
Selenium	0.050	0.005		mg/L	08/12/2010 1438 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1438 MS	EPA 200.8
Uranium	0.173	0.001		mg/L	08/12/2010 1438 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1438 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1734 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	08/13/2010 1354 DG	EPA 200.7
Manganese	0.44	0.02		mg/L	08/13/2010 1354 DG	EPA 200.7

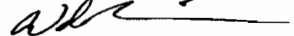
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-006
Client Sample ID: P50113W-FD
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 10:20:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.46	s.u.			08/11/2010 1020	Field
Conductivity	1627	µm		hos/cm	08/11/2010 1020	Field
Dissolved Oxygen	1.77	mg		/L	08/11/2010 1020	Field
Dissolved Oxygen (pct)	15.0			%	08/11/2010 1020	Field
Turbidity	0.24	NT		U	08/11/2010 1020	Field
Temperature	8.2	°C			08/11/2010 1020	Field
General Parameters						
pH	8.1	0.1		s.u.	08/13/2010 2043 KO	SM 4500 H B
Electrical Conductivity	1510	5		µmhos/cm	08/13/2010 2043 KO	SM 2510B
Total Dissolved Solids (180)	1060	10		mg/L	08/12/2010 1740 AMB	SM 2540
Solids, Total Dissolved (Calc)	870	10		mg/L	08/25/2010 744 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	08/16/2010 1105 AMB	SM 2540
Alkalinity, Total (As CaCO3)	537	5		mg/L	08/13/2010 2043 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/25/2010 1511 AS	EPA 350.1
Turbidity	0.1	0.1		NTU	08/12/2010 1422 KB	SM 2130
Anions						
Alkalinity, Bicarbonate as HCO3	655	5		mg/L	08/13/2010 2043 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	08/13/2010 2043 KO	SM 2320B
Chloride	36	1		mg/L	08/16/2010 1454 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/13/2010 2043 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	24.4	0.1		mg/L	08/20/2010 1524 AS	EPA 353.2
Sulfate	172	1		mg/L	08/16/2010 1454 KO	EPA 300.0
Cations						
Calcium	98	1		mg/L	08/12/2010 1737 DG	EPA 200.7
Magnesium	52	1		mg/L	08/12/2010 1737 DG	EPA 200.7
Potassium	6	1		mg/L	08/12/2010 1737 DG	EPA 200.7
Sodium	162	1		mg/L	08/12/2010 1737 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-006
Client Sample ID: P50113W-FD
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 10:20:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.74	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Chloride	1.01	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Nitrate + Nitrite as N	1.73	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sulfate	3.58	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Calcium	4.90	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Magnesium	4.31	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Potassium	0.16	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sodium	7.04	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.41	0		meq/L	08/25/2010 744 KO	SM 1030E
Anion Sum	17.09	0		meq/L	08/25/2010 744 KO	SM 1030E
Cation-Anion Balance	2.02	0		%	08/25/2010 744 KO	SM 1030E
Radio Chemistry						
Gross Alpha	83.2 ± 6.5	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	33.1 ± 4.5	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2		pCi/L	10/12/2010 946 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/26/2010 2138 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/23/2010 1109 MS	EPA 200.8

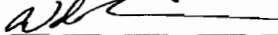
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 17 of 21



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-006
Client Sample ID: P50113W-FD
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 10:20:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1737 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1441 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1441 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/12/2010 1737 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1441 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1737 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1441 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1737 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1441 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 947 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1441 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1737 DG	EPA 200.7
Selenium	0.047	0.005		mg/L	08/12/2010 1441 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1441 MS	EPA 200.8
Uranium	0.173	0.001		mg/L	08/12/2010 1441 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1441 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1737 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	08/13/2010 1357 DG	EPA 200.7
Manganese	0.45	0.02		mg/L	08/13/2010 1357 DG	EPA 200.7

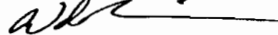
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-001
Client Sample ID: P50883W
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 9:45:00 AM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.78	s.u.			08/24/2010 945	Field
Conductivity	658	µmhos/cm			08/24/2010 945	Field
Dissolved Oxygen	4.37	mg/L			08/24/2010 945	Field
Dissolved Oxygen (pct)	39.3			%	08/24/2010 945	Field
Turbidity	19.48	NT		U	08/24/2010 945	Field
Temperature	10.5	°C			08/24/2010 945	Field
General Parameters						
pH	8.1	0.1		s.u.	08/26/2010 1730 KO	SM 4500 H B
Electrical Conductivity	588	5		µmhos/cm	08/26/2010 1730 KO	SM 2510B
Total Dissolved Solids (180)	370	10		mg/L	08/27/2010 1120 AMB	SM 2540
Solids, Total Dissolved (Calc)	360	10		mg/L	09/03/2010 757 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	296	5		mg/L	08/26/2010 1730 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	09/08/2010 946 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	361	5		mg/L	08/26/2010 1730 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/26/2010 1730 KO	SM 2320B
Chloride	3	1		mg/L	08/26/2010 1655 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/26/2010 1730 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.1	0.1		mg/L	08/31/2010 1746 AS	EPA 353.2
Sulfate	39	1		mg/L	08/26/2010 1655 KO	EPA 300.0
Cations						
Calcium	33	1		mg/L	08/30/2010 1036 DG	EPA 200.7
Magnesium	16	1		mg/L	08/30/2010 1036 DG	EPA 200.7
Potassium	7	1		mg/L	08/30/2010 1036 DG	EPA 200.7
Sodium	81	1		mg/L	08/30/2010 1036 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-001
Client Sample ID: P50883W
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 9:45:00 AM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	5.91	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Chloride	0.09	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Fluoride	ND	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Sulfate	0.80	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Calcium	1.64	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Magnesium	1.28	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Potassium	0.18	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Sodium	3.53	0.01		meq/L	09/03/2010 757 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	6.64	0		meq/L	09/03/2010 757 KO	SM 1030E
Anion Sum	6.82	0		meq/L	09/03/2010 757 KO	SM 1030E
Cation-Anion Balance	1.29	0		%	09/03/2010 757 KO	SM 1030E
Radio Chemistry						
Gross Alpha	15.4 ± 1.5	2		pCi/L	10/02/2010 2207 SH	SM 7110B
Gross Beta	10.1 ± 1.1	3		pCi/L	10/02/2010 2207 SH	SM 7110B
Radium 226 (Dissolved)	7.7 ± 0.5	0.2		pCi/L	10/05/2010 834 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/10/2010 2120 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/23/2010 1443 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/23/2010 1706 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/23/2010 1443 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2		pCi/L	10/20/2010 1407 WN	ACW10
Thorium 230 (Suspended)	ND	0.2		pCi/L	10/20/2010 1407 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	09/08/2010 1138 MS	EPA 200.8

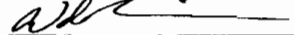
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 2 of 12



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/21/2010
Report ID: S1008471001

Project: ROSS ISR
Lab ID: S1008471-001
Client Sample ID: P50883W
COC: 131167

Work Order: S1008471
Collection Date: 8/24/2010 9:45:00 AM
Date Received: 8/25/2010 4:17:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/30/2010 1036 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/26/2010 1654 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/26/2010 1654 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/30/2010 1036 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/26/2010 1654 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/30/2010 1036 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/26/2010 1654 MS	EPA 200.8
Iron	0.07	0.05		mg/L	08/30/2010 1036 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/26/2010 1654 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/31/2010 808 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/26/2010 1654 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/30/2010 1036 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/26/2010 1654 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/26/2010 1654 MS	EPA 200.8
Uranium	0.025	0.001		mg/L	08/26/2010 1654 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/26/2010 1654 MS	EPA 200.8
Zinc	0.04	0.01		mg/L	08/30/2010 1036 DG	EPA 200.7
Total Metals						
Iron	1.60	0.05		mg/L	08/30/2010 1651 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	08/30/2010 1651 DG	EPA 200.7

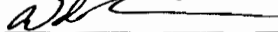
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-007
Client Sample ID: P71108W-RAW
COC: 131165


Work Order: S1008198
Collection Date: 8/11/2010 11:30:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.47	s.u.			08/11/2010 1130	Field
Conductivity	1697	µm		hos/cm	08/11/2010 1130	Field
Dissolved Oxygen	1.94	mg		/L	08/11/2010 1130	Field
Dissolved Oxygen (pct)	18.0			%	08/11/2010 1130	Field
Turbidity	0.29	NT		U	08/11/2010 1130	Field
Temperature	11.5	°C			08/11/2010 1130	Field
General Parameters						
pH	8.1	0.1		s.u.	08/13/2010 2054 KO	SM 4500 H B
Electrical Conductivity	1660	5		µmhos/cm	08/13/2010 2054 KO	SM 2510B
Total Dissolved Solids (180)	1160	10		mg/L	08/12/2010 1745 AMB	SM 2540
Solids, Total Dissolved (Calc)	1090	10		mg/L	08/25/2010 744 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	08/16/2010 1110 AMB	SM 2540
Alkalinity, Total (As CaCO ₃)	549	5		mg/L	08/13/2010 2054 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/25/2010 1512 AS	EPA 350.1
Turbidity	ND	0.1		NTU	08/12/2010 1424 KB	SM 2130
Anions						
Alkalinity, Bicarbonate as HCO ₃	670	5		mg/L	08/13/2010 2054 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/13/2010 2054 KO	SM 2320B
Chloride	4	1		mg/L	08/16/2010 1505 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	08/13/2010 2054 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.2	0.1		mg/L	08/20/2010 1525 AS	EPA 353.2
Sulfate	377	1		mg/L	08/16/2010 1505 KO	EPA 300.0
Cations						
Calcium	65	1		mg/L	08/12/2010 1739 DG	EPA 200.7
Magnesium	66	1		mg/L	08/12/2010 1739 DG	EPA 200.7
Potassium	9	1		mg/L	08/12/2010 1739 DG	EPA 200.7
Sodium	242	1		mg/L	08/12/2010 1739 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-007
Client Sample ID: P71108W-RAW
COC: 131165

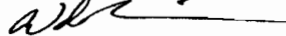
Work Order: S1008198
Collection Date: 8/11/2010 11:30:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.97	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Chloride	0.12	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Fluoride	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Nitrate + Nitrite as N	0.01	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sulfate	7.84	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Calcium	3.25	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Magnesium	5.45	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Potassium	0.23	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sodium	10.52	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.46	0		meq/L	08/25/2010 744 KO	SM 1030E
Anion Sum	18.97	0		meq/L	08/25/2010 744 KO	SM 1030E
Cation-Anion Balance	1.26	0		%	08/25/2010 744 KO	SM 1030E
Radio Chemistry						
Gross Alpha	37.0 ± 4.5	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	21.7 ± 4.2	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	0.9 ± 0.2	0.2		pCi/L	09/21/2010 1236 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.6 ± 0.9	1		pCi/L	09/26/2010 2138 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/23/2010 1124 MS	EPA 200.8

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-007
Client Sample ID: P71108W-RAW
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 11:30:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1739 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1445 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1445 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/12/2010 1739 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1445 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1739 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1445 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1739 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1445 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 949 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1445 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1739 DG	EPA 200.7
Selenium	0.008	0.005		mg/L	08/12/2010 1445 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1445 MS	EPA 200.8
Uranium	0.065	0.001		mg/L	08/12/2010 1445 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1445 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	08/12/2010 1739 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	08/13/2010 1406 DG	EPA 200.7
Manganese	0.21	0.02		mg/L	08/13/2010 1406 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008196001

Project: ROSS
Lab ID: S1008196-001
Client Sample ID: P17177W
COC: 131166

Work Order: S1008196
Collection Date: 8/11/2010 12:15:00 PM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.34	s.u.			08/11/2010 1215	Field
Conductivity	997	µm		hos/cm	08/11/2010 1215	Field
Dissolved Oxygen	4.00	mg		/L	08/11/2010 1215	Field
Dissolved Oxygen (pct)	35.2			%	08/11/2010 1215	Field
Turbidity	1.34	NT		U	08/11/2010 1215	Field
Temperature	9.5	°C			08/11/2010 1215	Field
General Parameters						
pH	8.0	0.1		s.u.	08/13/2010 1911 KO	SM 4500 H B
Electrical Conductivity	889	5		µmhos/cm	08/13/2010 1911 KO	SM 2510B
Total Dissolved Solids (180)	590	10		mg/L	08/12/2010 1700 AMB	SM 2540
Solids, Total Dissolved (Calc)	460	10		mg/L	08/24/2010 756 KO	SM 1030E
Alkalinity, Total (As CaCO3)	331	5		mg/L	08/19/2010 1413 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/20/2010 1113 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	404	5		mg/L	08/19/2010 1413 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	08/19/2010 1413 KO	SM 2320B
Chloride	19	1		mg/L	08/16/2010 1340 KO	EPA 300.0
Fluoride	ND	0.1		mg/L	08/13/2010 1911 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	22.4	0.1		mg/L	08/20/2010 1517 AS	EPA 353.2
Sulfate	40	1		mg/L	08/16/2010 1340 KO	EPA 300.0
Cations						
Calcium	108	1		mg/L	08/18/2010 1448 DG	EPA 200.7
Magnesium	30	1		mg/L	08/18/2010 1448 DG	EPA 200.7
Potassium	5	1		mg/L	08/18/2010 1448 DG	EPA 200.7
Sodium	38	1		mg/L	08/18/2010 1448 DG	EPA 200.7

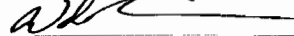
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008196001

Project: ROSS
Lab ID: S1008196-001
Client Sample ID: P17177W
COC: 131166

Work Order: S1008196
Collection Date: 8/11/2010 12:15:00 PM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.61	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Chloride	0.52	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Fluoride	ND	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Nitrate + Nitrite as N	1.59	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Sulfate	0.83	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Calcium	5.39	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Magnesium	2.46	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Potassium	0.12	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Sodium	1.63	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	9.62	0		meq/L	08/24/2010 756 KO	SM 1030E
Anion Sum	9.58	0		meq/L	08/24/2010 756 KO	SM 1030E
Cation-Anion Balance	0.23	0		%	08/24/2010 756 KO	SM 1030E
Radio Chemistry						
Gross Alpha	16.8 ± 2.2	2		pCi/L	09/01/2010 000 SH	SM 7110B
Gross Beta	8.60 ± 2.06	3.3		pCi/L	09/01/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/21/2010 1236 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/21/2010 2313 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/30/2010 1501 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/30/2010 1501 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/20/2010 1044 MS	EPA 200.8

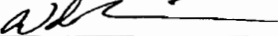
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008196001

Project: ROSS
Lab ID: S1008196-001
Client Sample ID: P17177W
COC: 131166

Work Order: S1008196
Collection Date: 8/11/2010 12:15:00 PM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1709 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1358 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1358 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/12/2010 1709 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1358 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1709 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1358 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1709 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1358 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 931 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1358 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1709 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/12/2010 1358 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1358 MS	EPA 200.8
Uranium	0.022	0.001		mg/L	08/12/2010 1358 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1358 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1709 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	08/13/2010 1336 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/13/2010 1336 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-003
Client Sample ID: P84665W
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:00:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.42	s.u.			08/11/2010 900	Field
Conductivity	983	µm		hos/cm	08/11/2010 900	Field
Dissolved Oxygen	3.14	mg		/L	08/11/2010 900	Field
Dissolved Oxygen (pct)	28.3			%	08/11/2010 900	Field
Turbidity	0.88	NT		U	08/11/2010 900	Field
Temperature	11.0	°C			08/11/2010 900	Field
General Parameters						
pH	8.1	0.1		s.u.	08/13/2010 2012 KO	SM 4500 H B
Electrical Conductivity	936	5		µmhos/cm	08/13/2010 2012 KO	SM 2510B
Total Dissolved Solids (180)	650	10		mg/L	08/12/2010 1720 AMB	SM 2540
Solids, Total Dissolved (Calc)	570	10		mg/L	08/25/2010 744 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	412	5		mg/L	08/13/2010 2012 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/25/2010 1508 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	503	5		mg/L	08/13/2010 2012 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/13/2010 2012 KO	SM 2320B
Chloride	8	1		mg/L	08/16/2010 1422 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	08/13/2010 2012 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	2.0	0.1		mg/L	08/20/2010 1521 AS	EPA 353.2
Sulfate	107	1		mg/L	08/16/2010 1422 KO	EPA 300.0
Cations						
Calcium	81	1		mg/L	08/12/2010 1730 DG	EPA 200.7
Magnesium	36	1		mg/L	08/12/2010 1730 DG	EPA 200.7
Potassium	5	1		mg/L	08/12/2010 1730 DG	EPA 200.7
Sodium	83	1		mg/L	08/12/2010 1730 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-003
Client Sample ID: P84665W
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:00:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.24	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Chloride	0.23	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Fluoride	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Nitrate + Nitrite as N	0.13	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sulfate	2.22	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Calcium	4.01	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Magnesium	2.99	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Potassium	0.13	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sodium	3.58	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.74	0		meq/L	08/25/2010 744 KO	SM 1030E
Anion Sum	10.84	0		meq/L	08/25/2010 744 KO	SM 1030E
Cation-Anion Balance	0.48	0		%	08/25/2010 744 KO	SM 1030E
Radio Chemistry						
Gross Alpha	26.7 ± 2.6	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	16.0 ± 2.1	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	0.3 ± 0.1	0.2		pCi/L	09/21/2010 1236 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/21/2010 2313 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/23/2010 1057 MS	EPA 200.8


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-003
Client Sample ID: P84665W
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:00:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1730 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1431 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1431 MS	EPA 200.8
Boron	ND	0.1		mg/L	08/12/2010 1730 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1431 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1730 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1431 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1730 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1431 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 942 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1431 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1730 DG	EPA 200.7
Selenium	0.007	0.005		mg/L	08/12/2010 1431 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1431 MS	EPA 200.8
Uranium	0.056	0.001		mg/L	08/12/2010 1431 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1431 MS	EPA 200.8
Zinc	0.08	0.01		mg/L	08/12/2010 1730 DG	EPA 200.7
Total Metals						
Iron	0.07	0.05		mg/L	08/13/2010 1350 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	08/13/2010 1350 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-004
Client Sample ID: SB WELL01
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:20:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.96	s.u.			08/11/2010 920	Field
Conductivity	1263	µm		hos/cm	08/11/2010 920	Field
Dissolved Oxygen	1.71	mg		/L	08/11/2010 920	Field
Dissolved Oxygen (pct)	15.7			%	08/11/2010 920	Field
Turbidity	0.86	NT		U	08/11/2010 920	Field
Temperature	11.2	°C			08/11/2010 920	Field
General Parameters						
pH	8.7	0.1		s.u.	08/13/2010 2021 KO	SM 4500 H B
Electrical Conductivity	1140	5		µmhos/cm	08/13/2010 2021 KO	SM 2510B
Total Dissolved Solids (180)	770	10		mg/L	08/12/2010 1725 AMB	SM 2540
Solids, Total Dissolved (Calc)	700	10		mg/L	08/25/2010 744 KO	SM 1030E
Total Suspended Solids	ND	5		mg/L	08/16/2010 1055 AMB	SM 2540
Alkalinity, Total (As CaCO ₃)	532	5		mg/L	08/13/2010 2021 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	08/25/2010 1509 AS	EPA 350.1
Turbidity	0.1	0.1		NTU	08/12/2010 1418 KB	SM 2130
Anions						
Alkalinity, Bicarbonate as HCO ₃	602	5		mg/L	08/13/2010 2021 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	23	5		mg/L	08/13/2010 2021 KO	SM 2320B
Chloride	1	1		mg/L	08/16/2010 1433 KO	EPA 300.0
Fluoride	ND	0.1		mg/L	08/13/2010 2021 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/20/2010 1522 AS	EPA 353.2
Sulfate	96	1		mg/L	08/16/2010 1433 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	08/12/2010 1732 DG	EPA 200.7
Magnesium	ND	1		mg/L	08/12/2010 1732 DG	EPA 200.7
Potassium	3	1		mg/L	08/12/2010 1732 DG	EPA 200.7
Sodium	274	1		mg/L	08/12/2010 1732 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-004
Client Sample ID: SB WELL01
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:20:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.87	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Carbonate as CO ₃	0.77	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Chloride	0.03	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Fluoride	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sulfate	2.00	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Calcium	0.10	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Magnesium	ND	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Potassium	0.06	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Sodium	11.93	0.01		meq/L	08/25/2010 744 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.10	0		meq/L	08/25/2010 744 KO	SM 1030E
Anion Sum	12.68	0		meq/L	08/25/2010 744 KO	SM 1030E
Cation-Anion Balance	2.32	0		%	08/25/2010 744 KO	SM 1030E
Radio Chemistry						
Gross Alpha	3.4 ± 1.2	2		pCi/L	09/29/2010 1956 SH	SM 7110B
Gross Beta	ND	3		pCi/L	09/29/2010 1956 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	09/21/2010 1236 SH	SM 7500-Ra B
Radium 226 (Suspended)	0.7 ± 0.1	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/21/2010 2313 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	1.5 ± 0.4	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/24/2010 1127 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/23/2010 1059 MS	EPA 200.8

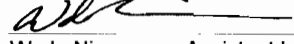
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 10/12/2010
Report ID: S1008198001

Project: ROSS
Lab ID: S1008198-004
Client Sample ID: SB WELL01
COC: 131165

Work Order: S1008198
Collection Date: 8/11/2010 9:20:00 AM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1732 DG	EPA 200.7
Arsenic	0.006	0.005		mg/L	08/12/2010 1434 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1434 MS	EPA 200.8
Boron	0.1	0.1		mg/L	08/12/2010 1732 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1434 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1732 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1434 MS	EPA 200.8
Iron	ND	0.05		mg/L	08/12/2010 1732 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1434 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 944 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1434 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1732 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/12/2010 1434 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1434 MS	EPA 200.8
Uranium	ND	0.001		mg/L	08/12/2010 1434 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1434 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1732 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	08/13/2010 1352 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/13/2010 1352 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008196001

Project: ROSS
Lab ID: S1008196-002
Client Sample ID: SBWELL02
COC: 131166

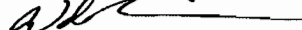
Work Order: S1008196
Collection Date: 8/11/2010 1:00:00 PM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.70	s.u.			08/11/2010 1300	Field
Conductivity	843	µm		hos/cm	08/11/2010 1300	Field
Dissolved Oxygen	1.30	mg		/L	08/11/2010 1300	Field
Dissolved Oxygen (pct)	12.0			%	08/11/2010 1300	Field
Turbidity	1.23	NT		U	08/11/2010 1300	Field
Temperature	10.8	°C			08/11/2010 1300	Field
General Parameters						
pH	8.2	0.1		s.u.	08/13/2010 1921 KO	SM 4500 H B
Electrical Conductivity	735	5		µmhos/cm	08/13/2010 1921 KO	SM 2510B
Total Dissolved Solids (180)	480	10		mg/L	08/12/2010 1705 AMB	SM 2540
Solids, Total Dissolved (Calc)	450	10		mg/L	08/24/2010 756 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	387	5		mg/L	08/13/2010 1921 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	08/20/2010 1114 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	472	5		mg/L	08/13/2010 1921 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	08/13/2010 1921 KO	SM 2320B
Chloride	1	1		mg/L	08/16/2010 1350 KO	EPA 300.0
Fluoride	ND	0.1		mg/L	08/13/2010 1921 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.4	0.1		mg/L	08/20/2010 1518 AS	EPA 353.2
Sulfate	37	1		mg/L	08/16/2010 1350 KO	EPA 300.0
Cations						
Calcium	39	1		mg/L	08/12/2010 1716 DG	EPA 200.7
Magnesium	26	1		mg/L	08/12/2010 1716 DG	EPA 200.7
Potassium	16	1		mg/L	08/12/2010 1716 DG	EPA 200.7
Sodium	98	1		mg/L	08/12/2010 1716 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND	Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008196001

Project: ROSS
Lab ID: S1008196-002
Client Sample ID: SBWELL02
COC: 131166

Work Order: S1008196
Collection Date: 8/11/2010 1:00:00 PM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	7.73	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Chloride	0.02	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Fluoride	ND	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Nitrate + Nitrite as N	0.03	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Sulfate	0.76	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Calcium	1.92	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Magnesium	2.10	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Potassium	0.41	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Sodium	4.25	0.01		meq/L	08/24/2010 756 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	8.69	0		meq/L	08/24/2010 756 KO	SM 1030E
Anion Sum	8.56	0		meq/L	08/24/2010 756 KO	SM 1030E
Cation-Anion Balance	0.76	0		%	08/24/2010 756 KO	SM 1030E
Radio Chemistry						
Gross Alpha	3.89 ± 1.34	2		pCi/L	09/01/2010 000 SH	SM 7110B
Gross Beta	9.53 ± 2.12	3.4		pCi/L	09/01/2010 000 SH	SM 7110B
Radium 226 (Dissolved)	0.2 ± 0.1	0.2		pCi/L	09/21/2010 1236 SH	SM 7500-Ra B
Radium 226 (Suspended)	7.0 ± 0.4	0.2		pCi/L	09/25/2010 1558 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.22 ± 0.99	1		pCi/L	09/21/2010 2313 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	09/02/2010 1801 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	09/08/2010 2213 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	09/30/2010 1501 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	09/30/2010 1501 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/20/2010 1047 MS	EPA 200.8


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/8/2010
Report ID: S1008196001

Project: ROSS
Lab ID: S1008196-002
Client Sample ID: SBWELL02
COC: 131166

Work Order: S1008196
Collection Date: 8/11/2010 1:00:00 PM
Date Received: 8/12/2010 9:08:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	08/12/2010 1716 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	08/12/2010 1405 MS	EPA 200.8
Barium	ND	0.5		mg/L	08/12/2010 1405 MS	EPA 200.8
Boron	0.1	0.1		mg/L	08/12/2010 1716 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	08/12/2010 1405 MS	EPA 200.8
Chromium	ND	0.01		mg/L	08/12/2010 1716 DG	EPA 200.7
Copper	ND	0.01		mg/L	08/12/2010 1405 MS	EPA 200.8
Iron	0.20	0.05		mg/L	08/12/2010 1716 DG	EPA 200.7
Lead	ND	0.02		mg/L	08/12/2010 1405 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/17/2010 933 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	08/12/2010 1405 MS	EPA 200.8
Nickel	ND	0.01		mg/L	08/12/2010 1716 DG	EPA 200.7
Selenium	ND	0.005		mg/L	08/12/2010 1405 MS	EPA 200.8
Silver	ND	0.003		mg/L	08/12/2010 1405 MS	EPA 200.8
Uranium	0.005	0.001		mg/L	08/12/2010 1405 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	08/12/2010 1405 MS	EPA 200.8
Zinc	ND	0.01		mg/L	08/12/2010 1716 DG	EPA 200.7
Total Metals						
Iron	0.61	0.05		mg/L	08/13/2010 1341 DG	EPA 200.7
Manganese	0.05	0.02		mg/L	08/13/2010 1341 DG	EPA 200.7


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-003
Client Sample ID: TWO1
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 1:00:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.05	s.u.			07/21/2010 1300	Field
Conductivity	1810	µm		hos/cm	07/21/2010 1300	Field
Dissolved Oxygen	1.19	mg		/L	07/21/2010 1300	Field
Dissolved Oxygen (pct)	11.2			%	07/21/2010 1300	Field
Turbidity	0.88	NT		U	07/21/2010 1300	Field
Temperature	12.8	°C			07/21/2010 1300	Field
General Parameters						
pH	8.4	0.1		s.u.	07/23/2010 2142 LJK	SM 4500 H B
Electrical Conductivity	2050	5		µmhos/cm	07/23/2010 2142 LJK	SM 2510B
Total Dissolved Solids (180)	1430	10		mg/L	07/22/2010 1220 MJH	SM 2540
Solids, Total Dissolved (Calc)	1310	10		mg/L	07/29/2010 753 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	685	5		mg/L	07/23/2010 2142 LJK	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	07/30/2010 1609 AS	EPA 350.1
Gross Alpha	ND	3.7		pCi/L	08/21/2010 1206 SH	SM 7110B
Gross Beta	8.55 ± 3.70	7		pCi/L	08/21/2010 1206 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/16/2010 1825 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 2222 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/24/2010 224 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 2316 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 2028 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/26/2010 1716 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO ₃	810	5		mg/L	07/23/2010 2142 LJK	SM 2320B
Alkalinity, Carbonate as CO ₃	13	5		mg/L	07/23/2010 2142 LJK	SM 2320B
Chloride	4	1		mg/L	07/26/2010 1607 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	07/26/2010 1526 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1507 AS	EPA 353.2
Sulfate	392	1		mg/L	07/26/2010 1607 KO	EPA 300.0

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-003
Client Sample ID: TW01
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 1:00:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	9	1		mg/L	07/22/2010 1334 RS	EPA 200.7
Magnesium	5	1		mg/L	07/22/2010 1334 RS	EPA 200.7
Potassium	7	1		mg/L	07/22/2010 1334 RS	EPA 200.7
Sodium	477	1		mg/L	07/22/2010 1334 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	13.28	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Carbonate as CO ₃	0.41	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Chloride	0.12	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sulfate	8.16	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Calcium	0.46	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Magnesium	0.39	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Potassium	0.17	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sodium	20.73	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.76	0		meq/L	07/29/2010 753 KO	SM 1030E
Anion Sum	22.05	0		meq/L	07/29/2010 753 KO	SM 1030E
Cation-Anion Balance	0.65	0		%	07/29/2010 753 KO	SM 1030E


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-003
Client Sample ID: TWO1
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 1:00:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1901 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/22/2010 1115 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/22/2010 1115 MS	EPA 200.8
Boron	0.5	0.1		mg/L	07/23/2010 1901 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/22/2010 1115 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1901 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/22/2010 1115 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/23/2010 1901 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/22/2010 1115 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/23/2010 910 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/22/2010 1115 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1901 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/22/2010 1115 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/22/2010 1115 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/22/2010 1115 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/22/2010 1115 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/23/2010 1901 RS	EPA 200.7
Total Metals						
Iron	0.09	0.05		mg/L	07/23/2010 1919 RS	EPA 200.7
Manganese	ND	0.02		mg/L	07/23/2010 1919 RS	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-004
Client Sample ID: TWO2
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 2:10:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.81	s.u.			07/21/2010 1410	Field
Conductivity	1889	µm		hos/cm	07/21/2010 1410	Field
Dissolved Oxygen	0.78	mg		/L	07/21/2010 1410	Field
Dissolved Oxygen (pct)	7.5			%	07/21/2010 1410	Field
Turbidity	1.42	NT		U	07/21/2010 1410	Field
Temperature	13.6	°C			07/21/2010 1410	Field
General Parameters						
pH	8.3	0.1		s.u.	07/23/2010 2153 LJK	SM 4500 H B
Electrical Conductivity	2170	5		µmhos/cm	07/23/2010 2153 LJK	SM 2510B
Total Dissolved Solids (180)	1500	10		mg/L	07/22/2010 1225 MJH	SM 2540
Solids, Total Dissolved (Calc)	1420	10		mg/L	07/29/2010 753 KO	SM 1030E
Alkalinity, Total (As CaCO3)	630	5		mg/L	07/23/2010 2153 LJK	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	07/30/2010 1616 AS	EPA 350.1
Gross Alpha	4.61 ± 2.26	3.2		pCi/L	08/21/2010 1206 SH	SM 7110B
Gross Beta	10.4 ± 3.7	7		pCi/L	08/21/2010 1206 SH	SM 7110B
Radium 226 (Dissolved)	0.41 ± 0.08	0.2		pCi/L	08/16/2010 1825 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/13/2010 2222 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	08/24/2010 224 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/15/2010 2316 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/14/2010 2028 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/17/2010 000 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/09/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	07/26/2010 1718 MS	EPA 200.8
Anions						
Alkalinity, Bicarbonate as HCO3	754	5		mg/L	07/23/2010 2153 LJK	SM 2320B
Alkalinity, Carbonate as CO3	8	5		mg/L	07/23/2010 2153 LJK	SM 2320B
Chloride	9	1		mg/L	07/26/2010 1618 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	07/26/2010 1529 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	07/30/2010 1508 AS	EPA 353.2
Sulfate	498	1		mg/L	07/26/2010 1618 KO	EPA 300.0


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

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- E Value above quantitation range
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- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-004
Client Sample ID: TWO2
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 2:10:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cations						
Calcium	26	1		mg/L	07/22/2010 1337 RS	EPA 200.7
Magnesium	12	1		mg/L	07/22/2010 1337 RS	EPA 200.7
Potassium	13	1		mg/L	07/22/2010 1337 RS	EPA 200.7
Sodium	482	1		mg/L	07/22/2010 1337 RS	EPA 200.7
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.35	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Carbonate as CO ₃	0.25	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Chloride	0.25	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sulfate	10.37	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Calcium	1.30	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Magnesium	0.96	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Potassium	0.31	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Sodium	20.95	0.01		meq/L	07/29/2010 753 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	23.53	0		meq/L	07/29/2010 753 KO	SM 1030E
Anion Sum	23.26	0		meq/L	07/29/2010 753 KO	SM 1030E
Cation-Anion Balance	0.59	0		%	07/29/2010 753 KO	SM 1030E

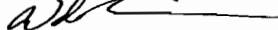
These results apply only to the samples tested.

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- E Value above quantitation range
- J Analyte detected below quantitation limits
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RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported: 8/25/2010
Report ID: S1007313001

Project: ROSS
Lab ID: S1007313-004
Client Sample ID: TWO2
COC: 131154

Work Order: S1007313
Collection Date: 7/21/2010 2:10:00 PM
Date Received: 7/22/2010 8:07:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/23/2010 1904 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/22/2010 1126 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/22/2010 1126 MS	EPA 200.8
Boron	0.4	0.1		mg/L	07/23/2010 1904 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/22/2010 1126 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/23/2010 1904 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/22/2010 1126 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/23/2010 1904 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/22/2010 1126 MS	EPA 200.8
Mercury	ND	0.001		mg/L	07/23/2010 911 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/22/2010 1126 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/23/2010 1904 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/22/2010 1126 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/22/2010 1126 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/22/2010 1126 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/22/2010 1126 MS	EPA 200.8
Zinc	0.03	0.01		mg/L	07/23/2010 1904 RS	EPA 200.7
Total Metals						
Iron	0.12	0.05		mg/L	07/23/2010 1929 RS	EPA 200.7
Manganese	0.03	0.02		mg/L	07/23/2010 1929 RS	EPA 200.7

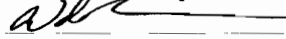
These results apply only to the samples tested.

Qualifiers:

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- E Value above quantitation range
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- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

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- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/14/2010
Report ID: S1007421001

Project: ROSS
Lab ID: S1007421-001
Client Sample ID: TWWELL03
COC: 131174

Work Order: S1007421
Collection Date: 7/28/2010 9:30:00 AM
Date Received: 7/29/2010 9:19:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.91	s.u.			07/28/2010 930	Field
Conductivity	1381	µm		hos/cm	07/28/2010 930	Field
Dissolved Oxygen	1.81	mg		/L	07/28/2010 930	Field
Dissolved Oxygen (pct)	16.7			%	07/28/2010 930	Field
Turbidity	0.51	NT		U	07/28/2010 930	Field
Temperature	11.5	°C			07/28/2010 930	Field
General Parameters						
pH	8.8	0.1		s.u.	07/29/2010 1444 KO	SM 4500 H B
Electrical Conductivity	1440	5		µmhos/cm	07/29/2010 1444 KO	SM 2510B
Total Dissolved Solids (180)	1000	10		mg/L	07/29/2010 1130 MJH	SM 2540
Solids, Total Dissolved (Calc)	950	10		mg/L	08/06/2010 1157 KO	SM 1030E
Alkalinity, Total (As CaCO3)	603	5		mg/L	07/29/2010 1444 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	08/04/2010 1217 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	664	5		mg/L	07/29/2010 1444 KO	SM 2320B
Alkalinity, Carbonate as CO3	35	5		mg/L	07/29/2010 1444 KO	SM 2320B
Chloride	2	1		mg/L	07/30/2010 1320 KO	EPA 300.0
Fluoride	1.3	0.1		mg/L	07/29/2010 1444 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	08/03/2010 1223 AS	EPA 353.2
Sulfate	201	1		mg/L	07/30/2010 1320 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	08/04/2010 1531 DG	EPA 200.7
Magnesium	1	1		mg/L	08/04/2010 1531 DG	EPA 200.7
Potassium	7	1		mg/L	08/04/2010 1531 DG	EPA 200.7
Sodium	374	1		mg/L	08/04/2010 1531 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

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- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/14/2010
Report ID: S1007421001

Project: ROSS
Lab ID: S1007421-001
Client Sample ID: TWWELL03
COC: 131174

Work Order: S1007421
Collection Date: 7/28/2010 9:30:00 AM
Date Received: 7/29/2010 9:19:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.88	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Carbonate as CO ₃	1.16	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Chloride	0.06	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Sulfate	4.19	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Calcium	0.11	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Magnesium	0.10	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Potassium	0.16	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Sodium	16.26	0.01		meq/L	08/06/2010 1157 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.65	0		meq/L	08/06/2010 1157 KO	SM 1030E
Anion Sum	16.39	0		meq/L	08/06/2010 1157 KO	SM 1030E
Cation-Anion Balance	0.79	0		%	08/06/2010 1157 KO	SM 1030E
Radio Chemistry						
Gross Alpha	ND	3.1		pCi/L	09/01/2010 808 SH	SM 7110B
Gross Beta	ND	6.7		pCi/L	09/01/2010 808 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	08/29/2010 2259 SH	SM 7500-Ra B
Radium 226 (Suspended)	ND	0.2		pCi/L	08/30/2010 2327 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	09/09/2010 2257 SH	Ra-05
Lead 210 (Dissolved)	ND	1		pCi/L	08/20/2010 2312 SH	OTW01
Lead 210 (Suspended)	ND	1		pCi/L	08/21/2010 2149 SH	OTW01
Polonium 210 (Dissolved)	ND	1		pCi/L	08/24/2010 1745 SH	OTW01
Polonium 210 (Suspended)	ND	1		pCi/L	08/24/2010 1549 SH	OTW01
Thorium 230 (Dissolved)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Thorium 230 (Suspended)	ND	0.2	L	pCi/L	08/13/2010 000 WN	ACW10
Uranium Suspended	ND	0.001		mg/L	08/02/2010 1900 MS	EPA 200.8


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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 9/14/2010
Report ID: S1007421001

Project: ROSS
Lab ID: S1007421-001
Client Sample ID: TWWELL03
COC: 131174

Work Order: S1007421
Collection Date: 7/28/2010 9:30:00 AM
Date Received: 7/29/2010 9:19:00 AM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	07/30/2010 715 RS	EPA 200.7
Arsenic	ND	0.005		mg/L	07/29/2010 1604 MS	EPA 200.8
Barium	ND	0.5		mg/L	07/29/2010 1604 MS	EPA 200.8
Boron	0.6	0.1		mg/L	07/30/2010 715 RS	EPA 200.7
Cadmium	ND	0.002		mg/L	07/29/2010 1604 MS	EPA 200.8
Chromium	ND	0.01		mg/L	07/30/2010 715 RS	EPA 200.7
Copper	ND	0.01		mg/L	07/29/2010 1604 MS	EPA 200.8
Iron	ND	0.05		mg/L	07/30/2010 715 RS	EPA 200.7
Lead	ND	0.02		mg/L	07/29/2010 1604 MS	EPA 200.8
Mercury	ND	0.001		mg/L	08/04/2010 824 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	07/29/2010 1604 MS	EPA 200.8
Nickel	ND	0.01		mg/L	07/30/2010 715 RS	EPA 200.7
Selenium	ND	0.005		mg/L	07/29/2010 1604 MS	EPA 200.8
Silver	ND	0.003		mg/L	07/29/2010 1604 MS	EPA 200.8
Uranium	ND	0.001		mg/L	07/29/2010 1604 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	07/29/2010 1604 MS	EPA 200.8
Zinc	ND	0.01		mg/L	07/30/2010 715 RS	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	08/04/2010 2224 DG	EPA 200.7
Manganese	ND	0.02		mg/L	08/04/2010 2224 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

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H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 19XX18 Date: 10-4-10 Time: 1600

Landowner

Name: Merit Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

~~Industrial~~ Stock ✓

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P67747W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.75

Cond. 3.05 MS

Temp. °C 13.2

Turbidity (ntu) 1.16

D.O. (mg/L) 4.97/47.6

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water fizzy - Clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: 22X-19 Date: 10-4-10 Time: 1640

Landowner

Name: Merid Energy

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

~~Industrial~~
~~Stock~~ ✓

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P50917W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.98

Cond. 2.66 mS

Temp. °C 12.3

Turbidity (ntu) 0.27

D.O. (mg/L) 1.21 / 11.4

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water & iggy - clear - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CSWELLOI Date: 10-4-10 Time: 1110

Landowner

Name: Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P132537W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.42

Cond. 1998

Temp. °C 15.3

Turbidity (ntu) 0.00

D.O. (mg/L) 0.83 / 7.3

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: CS WELL 03 Date: 10-4-10 Time: 1030

Landowner

Name: Strong

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P619W or
P819W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.28

Cond. 653 μ S

Temp. °C 10.5°C

Turbidity (ntu) 54.4

D.O. (mg/L) 1.88 / 16.9

Water Level (ft): —

% Combustible Gas: _____

Casing Height (ft): —

Ambient Air Temp: _____

Comments: Water slightly turbid - light brownish
yellow in color - no odor - water ran for
approx. 10-15 min and ran out of water

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: DW WELL 01 **Date:** 10-4-10 **Time:** 1200

Landowner

Name: Wood

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic ☒ _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.69

Cond. 3.26 MS

Temp. °C 11.2

Turbidity (ntu) 4.86

D.O. (mg/L) 1.19 / 10.5

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 03 Date: 10-4-10 Time: 1345

Landowner

Name: Berger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P7324P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.87

Cond. 1776 μ S

Temp. °C 10.2

Turbidity (ntu) 7.83

D.O. (mg/L) 1.03 / 9.4

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor

* No Sample - Well will not pump water

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELL 04 Date: 10/4/10 Time: 1410

Landowner

Name: Burger

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P 73 26 P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

Temp. ° C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: New power pole - all switches were
on but would not pump water?

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: HB WELLOS Date: 10-5-10 Time: 0815

Landowner

Name: BERGER

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P7430P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.84

Cond. 1575 μ S

Temp. °C 11.1

Turbidity (ntu) 14.46

D.O. (mg/L) 2.72 / 24.8

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor

* No sample - Will not pump water

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P144030W Date: 10-7-10 Time: 1300

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P144030W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH _____

Cond. _____

Temp. °C _____

Turbidity (ntu) _____

D.O. (mg/L) _____

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: No sample

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P17177W Date: 10-6-10 Time: 1300

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P17177W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.66

Cond. 860 μ S

Temp. °C 9.3

Turbidity (ntu) 1.27

D.O. (mg/L) 2.75/24.1

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Stock tank well east of Dallas and Anna's
house. - water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P21129P P21128P **Date:** 10-7-10 **Time:** 1230

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P21129P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.49

Cond. 991 μ S

Temp. °C 11.2

Turbidity (ntu) 3.52

D.O. (mg/L) 3.34 / 30.4

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P 22582P Date: 10-7-10 Time: 1200

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P22582P

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 9.11

Cond. 1141 μ S

Temp. °C 10.5

Turbidity (ntu) 1.05

D.O. (mg/L) 1.68 / 15.0

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50113W Date: 10-6-10 Time: 1145

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.85

Cond. 1636

Temp. °C 9.1

Turbidity (ntu) 0.98

D.O. (mg/L) 2.79/24.1

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Stock tank well down and north from
stony and Beckys house - Water clear - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P50883W Date: 10-7-10 Time: 1120

Landowner

Name: Swanda

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P50883W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.02

Cond. 699 μ S

Temp. °C 11.0

Turbidity (ntu) 1.35

D.O. (mg/L) 5.58 / 51.5

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor.

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: P84665W Date: 10-6-10 Time: 1030

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P84665W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.84

Cond. 960 μ S

Temp. °C 9.2

Turbidity (ntu) 0.97

D.O. (mg/L) 3.50/30.7

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Windmill well - water clear - no
odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SBWELLOI Date: 10-6-10 Time: 1110

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. —

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 9.08

Cond. 1176 μ S

Temp. °C 10.8

Turbidity (ntu) 1.08

D.O. (mg/L) 0.92 / 8.3

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Stormy and Burch well plus stock tank
and facilities well — water clear — no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: SB WELLO2 Date: 10-6-10 Time: 1330

Landowner

Name: Burch

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.15

Cond. 1043 μ S

Temp. °C 10.4

Turbidity (ntu) 0.94

D.O. (mg/L) 2.36 / 21.1

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Stock tank well by reservoir - water clear
no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW01 **Date:** 10-5-10 **Time:** 1045

Landowner

Name: Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic ☒ _____

SEO Permitted Facility Name: _____

Permit No. P74302W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.42

Cond. 1916

Temp. °C 13.2

Turbidity (ntu) 1.35

D.O. (mg/L) 1.03 / 10.1

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water Clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TWOZ Date: 10-5-10 Time: 0830

Landowner

Name: Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒

Domestic ☒

SEO Permitted Facility Name: _____

Permit No. P103666W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.25

Cond. 2.76 mS

Temp. °C 11.1

Turbidity (ntu) 2.05

D.O. (mg/L) 1.02 / 9.3

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water clear - no odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: FD TW02 Date: 10-5-10 Time: 0845

Landowner

Name: Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. _____

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 8.25

Cond. 2.76 mS

Temp. °C 11.1

Turbidity (ntu) 2.05

D.O. (mg/L) 1.02/9.3

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Field Duplicate - water clear -
No odor

WWC ENGINEERING
LANDOWNER WATER SAMPLING FORM
For STRATA ENERGY

Name: TW WELLO3 Date: 10-5-10 Time: 1120

Landowner

Name: Wesley

Address _____

Phone# _____

Legal Location

Qtr/Qtr _____

SEC _____

TWN _____

RNG _____

Picture #(s) _____

Stock ☒ _____

Domestic _____

SEO Permitted Facility Name: _____

Permit No. P192896W

Location (Decimal Degrees)

Lat _____

Long _____

Elev. _____

Water Quality

pH 7.07

Cond. 1437 μ S

Temp. °C 10.9

Turbidity (ntu) 0.90

D.O. (mg/L) 7.50 / 67.6

Water Level (ft): _____

% Combustible Gas: _____

Casing Height (ft): _____

Ambient Air Temp: _____

Comments: Water Clear - no odor



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-006
Client Sample ID: 19XX18
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 4:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.75	s.u.			10/04/2010 1600	Field
Conductivity	3050	µm		hos/cm	10/04/2010 1600	Field
Dissolved Oxygen	4.97	mg		/L	10/04/2010 1600	Field
Dissolved Oxygen (pct)	47.6			%	10/04/2010 1600	Field
Turbidity	1.16	NT		U	10/04/2010 1600	Field
Temperature	13.2	°C			10/04/2010 1600	Field
General Parameters						
pH	8.6	0.1		s.u.	10/06/2010 2208 KO	SM 4500 H B
Electrical Conductivity	2390	5		µmhos/cm	10/06/2010 2208 KO	SM 2510B
Total Dissolved Solids (180)	1660	10		mg/L	10/07/2010 1325 JF	SM 2540
Solids, Total Dissolved (Calc)	1520	10		mg/L	10/14/2010 1334 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	534	5		mg/L	10/06/2010 2208 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1522 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	609	5		mg/L	10/06/2010 2208 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	21	5		mg/L	10/06/2010 2208 KO	SM 2320B
Chloride	6	1		mg/L	10/06/2010 1922 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	10/07/2010 1854 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	10/15/2010 1517 AS	EPA 353.2
Sulfate	639	1		mg/L	10/06/2010 1922 KO	EPA 300.0
Cations						
Calcium	7	1		mg/L	10/06/2010 1522 DG	EPA 200.7
Magnesium	3	1		mg/L	10/06/2010 1522 DG	EPA 200.7
Potassium	5	1		mg/L	10/06/2010 1522 DG	EPA 200.7
Sodium	542	1		mg/L	10/06/2010 1522 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 16 of 21



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-006
Client Sample ID: 19XX18
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 4:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.98	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Carbonate as CO ₃	0.69	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Chloride	0.17	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sulfate	13.29	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Calcium	0.34	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Magnesium	0.21	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Potassium	0.12	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sodium	23.59	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	24.27	0		meq/L	10/14/2010 1334 KO	SM 1030E
Anion Sum	24.18	0		meq/L	10/14/2010 1334 KO	SM 1030E
Cation-Anion Balance	0.19	0		%	10/14/2010 1334 KO	SM 1030E
Radio Chemistry						
Gross Alpha	324 ± 12.9	2		pCi/L	10/22/2010 2301 SH	SM 7110B
Gross Beta	81.4 ± 5.1	3		pCi/L	10/22/2010 2301 SH	SM 7110B
Radium 226 (Dissolved)	42.0 ± 0.9	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/22/2010 2042 SH	Ra-05


These results apply only to the samples tested.

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- O Outside the Range of Dilutions

RL - Reporting Limit

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- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-006
Client Sample ID: 19XX18
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 4:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1522 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1255 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1255 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/06/2010 1522 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1255 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1522 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1255 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1522 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1255 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 940 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1255 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1522 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1255 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1255 MS	EPA 200.8
Uranium	0.078	0.001		mg/L	10/06/2010 1255 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1255 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1522 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/08/2010 1414 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/08/2010 1414 DG	EPA 200.7

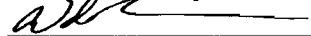
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-007
Client Sample ID: 22X-19
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 4:40:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.98	s.u.			10/04/2010 1640	Field
Conductivity	2660	µm		hos/cm	10/04/2010 1640	Field
Dissolved Oxygen	1.21	mg		/L	10/04/2010 1640	Field
Dissolved Oxygen (pct)	11.4			%	10/04/2010 1640	Field
Turbidity	0.27	NT		U	10/04/2010 1640	Field
Temperature	12.3	°C			10/04/2010 1640	Field
General Parameters						
pH	8.7	0.1		s.u.	10/06/2010 2218 KO	SM 4500 H B
Electrical Conductivity	2080	5		µmhos/cm	10/06/2010 2218 KO	SM 2510B
Total Dissolved Solids (180)	1420	10		mg/L	10/07/2010 1330 JF	SM 2540
Solids, Total Dissolved (Calc)	1290	10		mg/L	10/14/2010 1334 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	472	5		mg/L	10/06/2010 2218 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.5	0.1		mg/L	10/11/2010 1523 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	523	5		mg/L	10/06/2010 2218 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	26	5		mg/L	10/06/2010 2218 KO	SM 2320B
Chloride	10	1		mg/L	10/06/2010 1931 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	10/07/2010 1858 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1518 AS	EPA 353.2
Sulfate	511	1		mg/L	10/06/2010 1931 KO	EPA 300.0
Cations						
Calcium	5	1		mg/L	10/06/2010 1524 DG	EPA 200.7
Magnesium	2	1		mg/L	10/06/2010 1524 DG	EPA 200.7
Potassium	5	1		mg/L	10/06/2010 1524 DG	EPA 200.7
Sodium	474	1		mg/L	10/06/2010 1524 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-007
Client Sample ID: 22X-19
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 4:40:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.57	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Carbonate as CO ₃	0.86	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Chloride	0.26	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sulfate	10.64	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Calcium	0.27	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Magnesium	0.14	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Potassium	0.11	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sodium	20.60	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.13	0		meq/L	10/14/2010 1334 KO	SM 1030E
Anion Sum	20.39	0		meq/L	10/14/2010 1334 KO	SM 1030E
Cation-Anion Balance	1.78	0		%	10/14/2010 1334 KO	SM 1030E
Radio Chemistry						
Gross Alpha	47.9 ± 5.1	2		pCi/L	10/22/2010 2301 SH	SM 7110B
Gross Beta	12.2 ± 4.0	3		pCi/L	10/22/2010 2301 SH	SM 7110B
Radium 226 (Dissolved)	3.2 ± 0.3	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.4 ± 1.2	1		pCi/L	10/22/2010 2042 SH	Ra-05

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-007
Client Sample ID: 22X-19
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 4:40:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1524 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1258 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1258 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/06/2010 1524 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1258 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1524 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1258 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1524 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1258 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 945 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1258 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1524 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1258 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1258 MS	EPA 200.8
Uranium	0.020	0.001		mg/L	10/06/2010 1258 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1258 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1524 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/08/2010 1416 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/08/2010 1416 DG	EPA 200.7

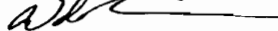
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-002
Client Sample ID: CS WELL 01
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 11:10:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.42	s.u.			10/04/2010 1110	Field
Conductivity	1989	µm		hos/cm	10/04/2010 1110	Field
Dissolved Oxygen	0.83	mg		/L	10/04/2010 1110	Field
Dissolved Oxygen (pct)	7.3			%	10/04/2010 1110	Field
Turbidity	0.00	NT		U	10/04/2010 1110	Field
Temperature	15.3	°C			10/04/2010 1110	Field
General Parameters						
pH	8.4	0.1		s.u.	10/06/2010 2114 KO	SM 4500 H B
Electrical Conductivity	2100	5		µmhos/cm	10/06/2010 2114 KO	SM 2510B
Total Dissolved Solids (180)	1430	10		mg/L	10/07/2010 1300 JF	SM 2540
Solids, Total Dissolved (Calc)	1360	10		mg/L	10/14/2010 1334 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	646	5		mg/L	10/06/2010 2114 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	10/11/2010 1512 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	763	5		mg/L	10/06/2010 2114 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	12	5		mg/L	10/06/2010 2114 KO	SM 2320B
Chloride	4	1		mg/L	10/06/2010 1843 KO	EPA 300.0
Fluoride	0.3	0.1		mg/L	10/07/2010 1838 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.5	0.1		mg/L	10/15/2010 1513 AS	EPA 353.2
Sulfate	460	1		mg/L	10/06/2010 1843 KO	EPA 300.0
Cations						
Calcium	22	1		mg/L	10/06/2010 1501 DG	EPA 200.7
Magnesium	18	1		mg/L	10/06/2010 1501 DG	EPA 200.7
Potassium	12	1		mg/L	10/06/2010 1501 DG	EPA 200.7
Sodium	459	1		mg/L	10/06/2010 1501 DG	EPA 200.7

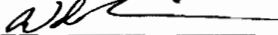
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-002
Client Sample ID: CS WELL 01
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 11:10:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.51	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Carbonate as CO ₃	0.40	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Chloride	0.12	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sulfate	9.58	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Calcium	1.08	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Magnesium	1.45	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Potassium	0.29	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sodium	19.95	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	22.79	0		meq/L	10/14/2010 1334 KO	SM 1030E
Anion Sum	22.64	0		meq/L	10/14/2010 1334 KO	SM 1030E
Cation-Anion Balance	0.31	0		%	10/14/2010 1334 KO	SM 1030E
Radio Chemistry						
Gross Alpha	12.2 ± 3.1	2		pCi/L	10/20/2010 2011 SH	SM 7110B
Gross Beta	4.3 ± 3.5	3		pCi/L	10/20/2010 2011 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.5 ± 1.2	1		pCi/L	10/18/2010 2347 SH	Ra-05

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-002
Client Sample ID: CS WELL 01
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 11:10:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1501 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1240 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1240 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/06/2010 1501 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1240 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1501 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1240 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1501 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1240 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 933 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1240 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1501 DG	EPA 200.7
Selenium	0.007	0.005		mg/L	10/06/2010 1240 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1240 MS	EPA 200.8
Uranium	0.011	0.001		mg/L	10/06/2010 1240 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1240 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1501 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/08/2010 1358 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/08/2010 1358 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-001
Client Sample ID: CS WELL 03
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 10:30:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.28	s.u.			10/04/2010 1030	Field
Conductivity	653	µm		hos/cm	10/04/2010 1030	Field
Dissolved Oxygen	1.88	mg		/L	10/04/2010 1030	Field
Dissolved Oxygen (pct)	16.9			%	10/04/2010 1030	Field
Turbidity	54.4	NT		U	10/04/2010 1030	Field
Temperature	10.5	°C			10/04/2010 1030	Field
General Parameters						
pH	8.2	0.1		s.u.	10/06/2010 2103 KO	SM 4500 H B
Electrical Conductivity	654	5		µmhos/cm	10/06/2010 2103 KO	SM 2510B
Total Dissolved Solids (180)	370	10		mg/L	10/07/2010 1255 JF	SM 2540
Solids, Total Dissolved (Calc)	390	10		mg/L	10/14/2010 1334 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	336	5		mg/L	10/06/2010 2103 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1511 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	410	5		mg/L	10/06/2010 2103 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	10/06/2010 2103 KO	SM 2320B
Chloride	3	1		mg/L	10/14/2010 000 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/07/2010 1834 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1512 AS	EPA 353.2
Sulfate	32	1		mg/L	10/14/2010 000 KO	EPA 300.0
Cations						
Calcium	38	1		mg/L	10/11/2010 1338 DG	EPA 200.7
Magnesium	20	1		mg/L	10/11/2010 1338 DG	EPA 200.7
Potassium	9	1		mg/L	10/11/2010 1338 DG	EPA 200.7
Sodium	82	1		mg/L	10/11/2010 1338 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 21



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-001
Client Sample ID: CS WELL 03
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 10:30:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.71	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Chloride	0.07	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Fluoride	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sulfate	0.67	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Calcium	1.87	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Magnesium	1.65	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Potassium	0.22	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sodium	3.57	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	7.33	0		meq/L	10/14/2010 1334 KO	SM 1030E
Anion Sum	7.47	0		meq/L	10/14/2010 1334 KO	SM 1030E
Cation-Anion Balance	0.93	0		%	10/14/2010 1334 KO	SM 1030E
Radio Chemistry						
Gross Alpha	3.5 ± 0.8	2		pCi/L	10/20/2010 2011 SH	SM 7110B
Gross Beta	8.8 ± 1.1	3		pCi/L	10/20/2010 2011 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/18/2010 2347 SH	Ra-05


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-001
Client Sample ID: CS WELL 03
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 10:30:00 AM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1459 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1237 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1237 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/06/2010 1459 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1237 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1459 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1237 MS	EPA 200.8
Iron	0.50	0.05		mg/L	10/06/2010 1459 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1237 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 931 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1237 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1459 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1237 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1237 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1237 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1237 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1459 DG	EPA 200.7
Total Metals						
Iron	3.94	0.05		mg/L	10/08/2010 1355 DG	EPA 200.7
Manganese	0.32	0.02		mg/L	10/08/2010 1355 DG	EPA 200.7

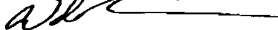
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-003
Client Sample ID: DW WELL 01
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 12:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.69	s.u.			10/04/2010 1200	Field
Conductivity	3260	µm		hos/cm	10/04/2010 1200	Field
Dissolved Oxygen	1.19	mg		/L	10/04/2010 1200	Field
Dissolved Oxygen (pct)	10.5			%	10/04/2010 1200	Field
Turbidity	4.86	NT		U	10/04/2010 1200	Field
Temperature	11.2	°C			10/04/2010 1200	Field
General Parameters						
pH	8.5	0.1		s.u.	10/06/2010 2136 KO	SM 4500 H B
Electrical Conductivity	2540	5		µmhos/cm	10/06/2010 2136 KO	SM 2510B
Total Dissolved Solids (180)	1760	10		mg/L	10/07/2010 1305 JF	SM 2540
Solids, Total Dissolved (Calc)	1610	10		mg/L	10/14/2010 1334 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	588	5		mg/L	10/06/2010 2136 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/11/2010 1513 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	690	5		mg/L	10/06/2010 2136 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	14	5		mg/L	10/06/2010 2136 KO	SM 2320B
Chloride	7	1		mg/L	10/06/2010 1853 KO	EPA 300.0
Fluoride	0.6	0.1		mg/L	10/07/2010 1841 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1514 AS	EPA 353.2
Sulfate	663	1		mg/L	10/06/2010 1853 KO	EPA 300.0
Cations						
Calcium	15	1		mg/L	10/06/2010 1510 DG	EPA 200.7
Magnesium	6	1		mg/L	10/06/2010 1510 DG	EPA 200.7
Potassium	13	1		mg/L	10/06/2010 1510 DG	EPA 200.7
Sodium	558	1		mg/L	10/06/2010 1510 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-003
Client Sample ID: DW WELL 01
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 12:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	11.30	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Carbonate as CO ₃	0.45	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Chloride	0.19	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Fluoride	0.03	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sulfate	13.80	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Calcium	0.72	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Magnesium	0.47	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Potassium	0.32	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sodium	24.27	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	25.79	0		meq/L	10/14/2010 1334 KO	SM 1030E
Anion Sum	25.79	0		meq/L	10/14/2010 1334 KO	SM 1030E
Cation-Anion Balance	0.01	0		%	10/14/2010 1334 KO	SM 1030E
Radio Chemistry						
Gross Alpha	11.7 ± 3.1	2		pCi/L	10/20/2010 2011 SH	SM 7110B
Gross Beta	7.2 ± 3.6	3		pCi/L	10/20/2010 2011 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/18/2010 2347 SH	Ra-05

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-003
Client Sample ID: DW WELL 01
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 12:00:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1510 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1244 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1244 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/06/2010 1510 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1244 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1510 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1244 MS	EPA 200.8
Iron	0.90	0.05		mg/L	10/06/2010 1510 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1244 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 935 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1244 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1510 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1244 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1244 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1244 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1244 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1510 DG	EPA 200.7
Total Metals						
Iron	1.71	0.05		mg/L	10/08/2010 1407 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	10/08/2010 1407 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-004
Client Sample ID: HB WELL 03
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 1:45:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.87		s.u.		10/04/2010 1345	Field
Conductivity	1776		µm	hos/cm	10/04/2010 1345	Field
Dissolved Oxygen	1.03		mg	/L	10/04/2010 1345	Field
Dissolved Oxygen (pct)	9.4			%	10/04/2010 1345	Field
Turbidity	7.83		NT	U	10/04/2010 1345	Field
Temperature	10.2		°C		10/04/2010 1345	Field
General Parameters						
pH	8.1	0.1		s.u.	10/06/2010 2147 KO	SM 4500 H B
Electrical Conductivity	1760	5		µmhos/cm	10/06/2010 2147 KO	SM 2510B
Total Dissolved Solids (180)	1210	10		mg/L	10/07/2010 1315 JF	SM 2540
Solids, Total Dissolved (Calc)	1150	10		mg/L	10/14/2010 1334 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	531	5		mg/L	10/06/2010 2147 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	10/11/2010 1520 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	648	5		mg/L	10/06/2010 2147 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	10/06/2010 2147 KO	SM 2320B
Chloride	8	1		mg/L	10/06/2010 1902 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/07/2010 1844 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1515 AS	EPA 353.2
Sulfate	408	1		mg/L	10/06/2010 1902 KO	EPA 300.0
Cations						
Calcium	79	1		mg/L	10/06/2010 1513 DG	EPA 200.7
Magnesium	44	1		mg/L	10/06/2010 1513 DG	EPA 200.7
Potassium	20	1		mg/L	10/06/2010 1513 DG	EPA 200.7
Sodium	275	1		mg/L	10/06/2010 1513 DG	EPA 200.7

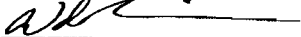
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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- 776 -

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-004
Client Sample ID: HB WELL 03
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 1:45:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.62	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Chloride	0.23	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sulfate	8.50	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Calcium	3.92	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Magnesium	3.58	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Potassium	0.51	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Sodium	11.96	0.01		meq/L	10/14/2010 1334 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	19.99	0		meq/L	10/14/2010 1334 KO	SM 1030E
Anion Sum	19.37	0		meq/L	10/14/2010 1334 KO	SM 1030E
Cation-Anion Balance	1.56	0		%	10/14/2010 1334 KO	SM 1030E
Radio Chemistry						
Gross Alpha	10.1 ± 2.9	2		pCi/L	10/20/2010 2011 SH	SM 7110B
Gross Beta	15.4 ± 3.8	3		pCi/L	10/20/2010 2011 SH	SM 7110B
Radium 226 (Dissolved)	0.8 ± 0.1	0.2		pCi/L	10/15/2010 1356 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/18/2010 2347 SH	Ra-05

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010074001

Project: ROSS
Lab ID: S1010074-004
Client Sample ID: HB WELL 03
COC: 131169

Work Order: S1010074
Collection Date: 10/4/2010 1:45:00 PM
Date Received: 10/5/2010 4:25:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1513 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1248 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1248 MS	EPA 200.8
Boron	0.2	0.1		mg/L	10/06/2010 1513 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1248 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1513 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1248 MS	EPA 200.8
Iron	4.14	0.05		mg/L	10/06/2010 1513 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1248 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/07/2010 937 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1248 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1513 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1248 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1248 MS	EPA 200.8
Uranium	0.002	0.001		mg/L	10/06/2010 1248 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1248 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1513 DG	EPA 200.7
Total Metals						
Iron	6.42	0.05		mg/L	10/08/2010 1409 DG	EPA 200.7
Manganese	0.21	0.02		mg/L	10/08/2010 1409 DG	EPA 200.7

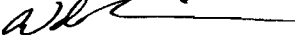
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-001
Client Sample ID: HB WELL 05
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:15:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.84	s.u.			10/05/2010 815	Field
Conductivity	1575	µm		hos/cm	10/05/2010 815	Field
Dissolved Oxygen	2.72	mg		/L	10/05/2010 815	Field
Dissolved Oxygen (pct)	24.8			%	10/05/2010 815	Field
Turbidity	14.46	NT		U	10/05/2010 815	Field
Temperature	11.1	°C			10/05/2010 815	Field
General Parameters						
pH	8.1	0.1		s.u.	10/06/2010 2229 KO	SM 4500 H B
Electrical Conductivity	1660	5		µmhos/cm	10/06/2010 2229 KO	SM 2510B
Total Dissolved Solids (180)	1100	10		mg/L	10/07/2010 1335 JF	SM 2540
Solids, Total Dissolved (Calc)	1050	10		mg/L	10/15/2010 1447 KO	SM 1030E
Alkalinity, Total (As CaCO3)	543	5		mg/L	10/06/2010 2229 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1524 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	662	5		mg/L	10/06/2010 2229 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	10/06/2010 2229 KO	SM 2320B
Chloride	4	1		mg/L	10/06/2010 1941 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/07/2010 1901 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1519 AS	EPA 353.2
Sulfate	367	1		mg/L	10/06/2010 1941 KO	EPA 300.0
Cations						
Calcium	79	1		mg/L	10/06/2010 1526 DG	EPA 200.7
Magnesium	36	1		mg/L	10/06/2010 1526 DG	EPA 200.7
Potassium	8	1		mg/L	10/06/2010 1526 DG	EPA 200.7
Sodium	229	1		mg/L	10/06/2010 1526 DG	EPA 200.7

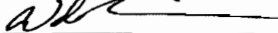
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-001
Client Sample ID: HB WELL 05
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:15:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.85	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Chloride	0.10	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sulfate	7.63	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Calcium	3.92	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Magnesium	2.93	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Potassium	0.21	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sodium	9.96	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	17.03	0		meq/L	10/15/2010 1447 KO	SM 1030E
Anion Sum	18.60	0		meq/L	10/15/2010 1447 KO	SM 1030E
Cation-Anion Balance	4.40	0		%	10/15/2010 1447 KO	SM 1030E
Radio Chemistry						
Gross Alpha	12.7 ± 3.0	2		pCi/L	10/22/2010 2301 SH	SM 7110B
Gross Beta	7.2 ± 3.9	3		pCi/L	10/22/2010 2301 SH	SM 7110B
Radium 226 (Dissolved)	0.2 ± 0.1	0.2		pCi/L	10/16/2010 1528 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/22/2010 2042 SH	Ra-05


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-001
Client Sample ID: HB WELL 05
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:15:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1526 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1302 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1302 MS	EPA 200.8
Boron	0.2	0.1		mg/L	10/06/2010 1526 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1302 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1526 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1302 MS	EPA 200.8
Iron	0.17	0.05		mg/L	10/06/2010 1526 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1302 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 839 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1302 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1526 DG	EPA 200.7
Selenium	0.005	0.005		mg/L	10/06/2010 1302 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1302 MS	EPA 200.8
Uranium	0.013	0.001		mg/L	10/06/2010 1302 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1302 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1526 DG	EPA 200.7
Total Metals						
Iron	2.40	0.05		mg/L	10/08/2010 1421 DG	EPA 200.7
Manganese	0.15	0.02		mg/L	10/08/2010 1421 DG	EPA 200.7

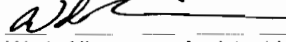
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-005
Client Sample ID: P17177W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 1:00:00 PM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.66	s.u.			10/06/2010 1300	Field
Conductivity	860	µm		hos/cm	10/06/2010 1300	Field
Dissolved Oxygen	2.75	mg		/L	10/06/2010 1300	Field
Dissolved Oxygen (pct)	24.1			%	10/06/2010 1300	Field
Turbidity	1.27	NT		U	10/06/2010 1300	Field
Temperature	9.3	°C			10/06/2010 1300	Field
General Parameters						
pH	8.0	0.1		s.u.	10/08/2010 1847 KO	SM 4500 H B
Electrical Conductivity	822	5		µmhos/cm	10/08/2010 1847 KO	SM 2510B
Total Dissolved Solids (180)	530	10		mg/L	10/08/2010 1610 JF	SM 2540
Solids, Total Dissolved (Calc)	450	10		mg/L	10/15/2010 819 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	320	5		mg/L	10/08/2010 1847 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1541 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	391	5		mg/L	10/08/2010 1847 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	10/08/2010 1847 KO	SM 2320B
Chloride	17	1		mg/L	10/08/2010 1313 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	10/08/2010 1847 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	20.0	0.1		mg/L	10/12/2010 1712 AS	EPA 353.2
Sulfate	45	1		mg/L	10/08/2010 1313 KO	EPA 300.0
Cations						
Calcium	100	1		mg/L	10/14/2010 1517 DG	EPA 200.7
Magnesium	27	1		mg/L	10/14/2010 1517 DG	EPA 200.7
Potassium	5	1		mg/L	10/14/2010 1517 DG	EPA 200.7
Sodium	39	1		mg/L	10/14/2010 1517 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-005
Client Sample ID: P17177W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 1:00:00 PM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.40	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Chloride	0.48	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Fluoride	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Nitrate + Nitrite as N	1.42	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sulfate	0.93	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Calcium	5.00	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Magnesium	2.19	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Potassium	0.12	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sodium	1.70	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	9.03	0		meq/L	10/15/2010 819 KO	SM 1030E
Anion Sum	9.26	0		meq/L	10/15/2010 819 KO	SM 1030E
Cation-Anion Balance	1.26	0		%	10/15/2010 819 KO	SM 1030E
Radio Chemistry						
Gross Alpha	15.7 ± 2.2	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	9.8 ± 1.9	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	0.3 ± 0.1	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/23/2010 1851 SH	Ra-05

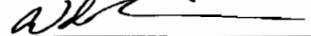
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-005
Client Sample ID: P17177W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 1:00:00 PM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1134 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1329 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1329 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/08/2010 1134 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1329 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1134 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1329 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1134 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1329 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 920 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1329 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1134 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/07/2010 1329 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1329 MS	EPA 200.8
Uranium	0.022	0.001		mg/L	10/07/2010 1329 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1329 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1134 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/10/2010 1031 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/10/2010 1031 DG	EPA 200.7

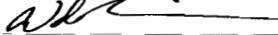
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-003
Client Sample ID: P21128P
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 12:30:00 PM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.49	s.u.			10/07/2010 1230	Field
Conductivity	991	µm		hos/cm	10/07/2010 1230	Field
Dissolved Oxygen	3.34	mg		/L	10/07/2010 1230	Field
Dissolved Oxygen (pct)	30.4			%	10/07/2010 1230	Field
Turbidity	3.52	NT		U	10/07/2010 1230	Field
Temperature	11.2	°C			10/07/2010 1230	Field
General Parameters						
pH	8.5	0.1		s.u.	10/08/2010 2358 KO	SM 4500 H B
Electrical Conductivity	973	5		µmhos/cm	10/08/2010 2358 KO	SM 2510B
Total Dissolved Solids (180)	620	10		mg/L	10/08/2010 1845 JF	SM 2540
Solids, Total Dissolved (Calc)	610	10		mg/L	10/18/2010 1545 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	425	5		mg/L	10/08/2010 2358 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	10/15/2010 1606 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	492	5		mg/L	10/08/2010 2358 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	13	5		mg/L	10/08/2010 2358 KO	SM 2320B
Chloride	3	1		mg/L	10/08/2010 1701 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/11/2010 1426 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	1.6	0.1		mg/L	10/15/2010 1547 AS	EPA 353.2
Sulfate	96	1		mg/L	10/08/2010 1701 KO	EPA 300.0
Cations						
Calcium	20	1		mg/L	10/08/2010 1318 DG	EPA 200.7
Magnesium	11	1		mg/L	10/08/2010 1318 DG	EPA 200.7
Potassium	20	1		mg/L	10/08/2010 1318 DG	EPA 200.7
Sodium	205	1		mg/L	10/08/2010 1318 DG	EPA 200.7

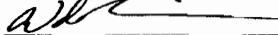
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-003
Client Sample ID: P21128P
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 12:30:00 PM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.06	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Carbonate as CO ₃	0.43	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Chloride	0.08	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Fluoride	ND	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Nitrate + Nitrite as N	0.11	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Sulfate	1.99	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Calcium	0.99	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Magnesium	0.92	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Potassium	0.51	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Sodium	8.92	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	11.34	0		meq/L	10/18/2010 1545 KO	SM 1030E
Anion Sum	10.69	0		meq/L	10/18/2010 1545 KO	SM 1030E
Cation-Anion Balance	2.95	0		%	10/18/2010 1545 KO	SM 1030E
Radio Chemistry						
Gross Alpha	224 ± 7.5	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	67.9 ± 3.0	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	0.3 ± 0.1	0.2		pCi/L	10/19/2010 1432 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/25/2010 1742 TWP	Ga-Tech


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-003
Client Sample ID: P21128P
COC: 131173

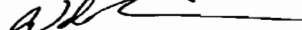
Work Order: S1010121
Collection Date: 10/7/2010 12:30:00 PM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1318 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/08/2010 1155 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/08/2010 1155 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/08/2010 1318 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/08/2010 1155 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1318 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/08/2010 1155 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1318 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/08/2010 1155 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 1243 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/08/2010 1155 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1318 DG	EPA 200.7
Selenium	0.165	0.005		mg/L	10/08/2010 1155 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/08/2010 1155 MS	EPA 200.8
Uranium	0.375	0.001		mg/L	10/08/2010 1155 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/08/2010 1155 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1318 DG	EPA 200.7
Total Metals						
Iron	0.13	0.05		mg/L	10/11/2010 1923 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/11/2010 1923 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND	Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager
December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-002
Client Sample ID: P22582P
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 12:00:00 PM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.11	s.u.			10/07/2010 1200	Field
Conductivity	1141	µm		hos/cm	10/07/2010 1200	Field
Dissolved Oxygen	1.68	mg		/L	10/07/2010 1200	Field
Dissolved Oxygen (pct)	15.0			%	10/07/2010 1200	Field
Turbidity	1.05	NT		U	10/07/2010 1200	Field
Temperature	10.5	°C			10/07/2010 1200	Field
General Parameters						
pH	8.7	0.1		s.u.	10/08/2010 2347 KO	SM 4500 H B
Electrical Conductivity	1120	5		µmhos/cm	10/08/2010 2347 KO	SM 2510B
Total Dissolved Solids (180)	730	10		mg/L	10/08/2010 1840 JF	SM 2540
Solids, Total Dissolved (Calc)	700	10		mg/L	10/18/2010 1545 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	491	5		mg/L	10/08/2010 2347 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.6	0.1		mg/L	10/15/2010 1605 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	536	5		mg/L	10/08/2010 2347 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	31	5		mg/L	10/08/2010 2347 KO	SM 2320B
Chloride	2	1		mg/L	10/08/2010 1651 KO	EPA 300.0
Fluoride	0.9	0.1		mg/L	10/11/2010 1422 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/15/2010 1546 AS	EPA 353.2
Sulfate	112	1		mg/L	10/08/2010 1651 KO	EPA 300.0
Cations						
Calcium	6	1		mg/L	10/08/2010 1316 DG	EPA 200.7
Magnesium	3	1		mg/L	10/08/2010 1316 DG	EPA 200.7
Potassium	4	1		mg/L	10/08/2010 1316 DG	EPA 200.7
Sodium	277	1		mg/L	10/08/2010 1316 DG	EPA 200.7

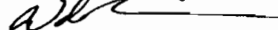
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-002
Client Sample ID: P22582P
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 12:00:00 PM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.78	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Carbonate as CO ₃	1.02	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Chloride	0.05	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Fluoride	0.04	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Sulfate	2.34	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Calcium	0.31	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Magnesium	0.24	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Potassium	0.10	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Sodium	12.03	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.69	0		meq/L	10/18/2010 1545 KO	SM 1030E
Anion Sum	12.25	0		meq/L	10/18/2010 1545 KO	SM 1030E
Cation-Anion Balance	1.77	0		%	10/18/2010 1545 KO	SM 1030E
Radio Chemistry						
Gross Alpha	2.8 ± 1.3	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	ND	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/19/2010 1432 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/25/2010 1438 TWP	Ga-Tech

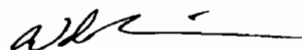
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-002
Client Sample ID: P22582P
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 12:00:00 PM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1316 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/08/2010 1151 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/08/2010 1151 MS	EPA 200.8
Boron	0.3	0.1		mg/L	10/08/2010 1316 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/08/2010 1151 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1316 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/08/2010 1151 MS	EPA 200.8
Iron	0.07	0.05		mg/L	10/08/2010 1316 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/08/2010 1151 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 1242 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/08/2010 1151 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1316 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/08/2010 1151 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/08/2010 1151 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/08/2010 1151 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/08/2010 1151 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1316 DG	EPA 200.7
Total Metals						
Iron	0.11	0.05		mg/L	10/11/2010 1914 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/11/2010 1914 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-003
Client Sample ID: P50113W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 11:45:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.85	s.u.			10/06/2010 1145	Field
Conductivity	1636	µm		hos/cm	10/06/2010 1145	Field
Dissolved Oxygen	2.79	mg		/L	10/06/2010 1145	Field
Dissolved Oxygen (pct)	24.1			%	10/06/2010 1145	Field
Turbidity	0.98	NT		U	10/06/2010 1145	Field
Temperature	9.1	°C			10/06/2010 1145	Field
General Parameters						
pH	8.0	0.1		s.u.	10/08/2010 1801 KO	SM 4500 H B
Electrical Conductivity	1640	5		µmhos/cm	10/08/2010 1801 KO	SM 2510B
Total Dissolved Solids (180)	1130	10		mg/L	10/08/2010 1555 JF	SM 2540
Solids, Total Dissolved (Calc)	980	10		mg/L	10/15/2010 819 KO	SM 1030E
Alkalinity, Total (As CaCO3)	534	5		mg/L	10/08/2010 1801 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1539 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	652	5		mg/L	10/08/2010 1801 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	10/08/2010 1801 KO	SM 2320B
Chloride	41	1		mg/L	10/08/2010 1255 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/08/2010 1801 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	29.0	0.1		mg/L	10/12/2010 1704 AS	EPA 353.2
Sulfate	231	1		mg/L	10/08/2010 1255 KO	EPA 300.0
Cations						
Calcium	94	1		mg/L	10/08/2010 1130 DG	EPA 200.7
Magnesium	54	1		mg/L	10/08/2010 1130 DG	EPA 200.7
Potassium	7	1		mg/L	10/08/2010 1130 DG	EPA 200.7
Sodium	202	1		mg/L	10/08/2010 1130 DG	EPA 200.7

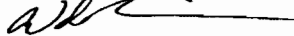
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-003
Client Sample ID: P50113W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 11:45:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	10.68	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Chloride	1.16	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Nitrate + Nitrite as N	2.06	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sulfate	4.80	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Calcium	4.66	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Magnesium	4.42	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Potassium	0.17	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sodium	8.77	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	18.03	0		meq/L	10/15/2010 819 KO	SM 1030E
Anion Sum	18.72	0		meq/L	10/15/2010 819 KO	SM 1030E
Cation-Anion Balance	1.87	0		%	10/15/2010 819 KO	SM 1030E
Radio Chemistry						
Gross Alpha	100 ± 7.2	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	38.1 ± 4.3	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	0.2 ± 0.1	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/23/2010 1851 SH	Ra-05


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-003
Client Sample ID: P50113W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 11:45:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water


Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1130 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1321 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1321 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/08/2010 1130 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1321 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1130 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1321 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1130 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1321 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 916 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1321 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1130 DG	EPA 200.7
Selenium	0.030	0.005		mg/L	10/07/2010 1321 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1321 MS	EPA 200.8
Uranium	0.189	0.001		mg/L	10/07/2010 1321 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1321 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1130 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/10/2010 1020 DG	EPA 200.7
Manganese	0.42	0.02		mg/L	10/10/2010 1020 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-001
Client Sample ID: P50883W
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 11:20:00 AM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.02	s.u.			10/07/2010 1120	Field
Conductivity	699	µm		hos/cm	10/07/2010 1120	Field
Dissolved Oxygen	5.58	mg		/L	10/07/2010 1120	Field
Dissolved Oxygen (pct)	51.5			%	10/07/2010 1120	Field
Turbidity	1.35	NT		U	10/07/2010 1120	Field
Temperature	11.0	°C			10/07/2010 1120	Field
General Parameters						
pH	8.2	0.1		s.u.	10/08/2010 2337 KO	SM 4500 H B
Electrical Conductivity	686	5		µmhos/cm	10/08/2010 2337 KO	SM 2510B
Total Dissolved Solids (180)	430	10		mg/L	10/08/2010 1835 JF	SM 2540
Solids, Total Dissolved (Calc)	400	10		mg/L	10/18/2010 1545 KO	SM 1030E
Alkalinity, Total (As CaCO3)	340	5		mg/L	10/08/2010 2337 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.1	0.1		mg/L	10/15/2010 1604 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	414	5		mg/L	10/08/2010 2337 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	10/08/2010 2337 KO	SM 2320B
Chloride	3	1		mg/L	10/08/2010 1606 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/11/2010 1419 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	0.2	0.1		mg/L	10/15/2010 1545 AS	EPA 353.2
Sulfate	44	1		mg/L	10/08/2010 1606 KO	EPA 300.0
Cations						
Calcium	44	1		mg/L	10/12/2010 1401 DG	EPA 200.7
Magnesium	20	1		mg/L	10/12/2010 1401 DG	EPA 200.7
Potassium	6	1		mg/L	10/12/2010 1401 DG	EPA 200.7
Sodium	81	1		mg/L	10/08/2010 1314 DG	EPA 200.7

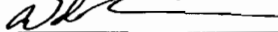
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-001
Client Sample ID: P50883W
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 11:20:00 AM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	6.79	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Chloride	0.07	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Fluoride	0.01	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Nitrate + Nitrite as N	0.01	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Sulfate	0.91	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Calcium	2.19	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Magnesium	1.62	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Potassium	0.15	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Sodium	3.53	0.01		meq/L	10/18/2010 1545 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	7.50	0		meq/L	10/18/2010 1545 KO	SM 1030E
Anion Sum	7.80	0		meq/L	10/18/2010 1545 KO	SM 1030E
Cation-Anion Balance	1.98	0		%	10/18/2010 1545 KO	SM 1030E
Radio Chemistry						
Gross Alpha	16.9 ± 1.7	2		pCi/L	10/19/2010 221 SH	SM 7110B
Gross Beta	6.4 ± 1.0	3		pCi/L	10/19/2010 221 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/19/2010 1432 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.27 ± 1.2	1		pCi/L	10/25/2010 1137 TWP	Ga-Tech


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010121001

Project: ROSS
Lab ID: S1010121-001
Client Sample ID: P50883W
COC: 131173

Work Order: S1010121
Collection Date: 10/7/2010 11:20:00 AM
Date Received: 10/7/2010 4:13:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1314 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/08/2010 1140 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/08/2010 1140 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/08/2010 1314 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/08/2010 1140 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1314 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/08/2010 1140 MS	EPA 200.8
Iron	0.09	0.05		mg/L	10/08/2010 1314 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/08/2010 1140 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 1240 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/08/2010 1140 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1314 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/08/2010 1140 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/08/2010 1140 MS	EPA 200.8
Uranium	0.028	0.001		mg/L	10/08/2010 1140 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/08/2010 1140 MS	EPA 200.8
Zinc	0.07	0.01		mg/L	10/08/2010 1314 DG	EPA 200.7
Total Metals						
Iron	0.23	0.05		mg/L	10/11/2010 1912 DG	EPA 200.7
Manganese	0.02	0.02		mg/L	10/11/2010 1912 DG	EPA 200.7

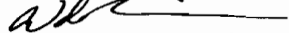
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-001
Client Sample ID: P84665W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 10:30:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	7.84	s.u.			10/06/2010 1030	Field
Conductivity	960	µm		hos/cm	10/06/2010 1030	Field
Dissolved Oxygen	3.50	mg		/L	10/06/2010 1030	Field
Dissolved Oxygen (pct)	30.7			%	10/06/2010 1030	Field
Turbidity	0.97	NT		U	10/06/2010 1030	Field
Temperature	9.2	°C			10/06/2010 1030	Field
General Parameters						
pH	8.0	0.1		s.u.	10/08/2010 1740 KO	SM 4500 H B
Electrical Conductivity	952	5		µmhos/cm	10/08/2010 1740 KO	SM 2510B
Total Dissolved Solids (180)	620	10		mg/L	10/08/2010 1545 JF	SM 2540
Solids, Total Dissolved (Calc)	560	10		mg/L	10/15/2010 819 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	412	5		mg/L	10/08/2010 1740 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1537 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	502	5		mg/L	10/08/2010 1740 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	ND	5		mg/L	10/08/2010 1740 KO	SM 2320B
Chloride	8	1		mg/L	10/07/2010 1547 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	10/08/2010 1740 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	2.4	0.1		mg/L	10/12/2010 1702 AS	EPA 353.2
Sulfate	107	1		mg/L	10/07/2010 1547 KO	EPA 300.0
Cations						
Calcium	79	1		mg/L	10/08/2010 1118 DG	EPA 200.7
Magnesium	37	1		mg/L	10/08/2010 1118 DG	EPA 200.7
Potassium	6	1		mg/L	10/08/2010 1118 DG	EPA 200.7
Sodium	75	1		mg/L	10/08/2010 1118 DG	EPA 200.7

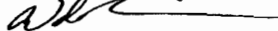
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 18



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-001
Client Sample ID: P84665W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 10:30:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	8.23	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Chloride	0.23	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Fluoride	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Nitrate + Nitrite as N	0.16	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sulfate	2.22	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Calcium	3.92	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Magnesium	3.05	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Potassium	0.15	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sodium	3.28	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	10.40	0		meq/L	10/15/2010 819 KO	SM 1030E
Anion Sum	10.86	0		meq/L	10/15/2010 819 KO	SM 1030E
Cation-Anion Balance	2.14	0		%	10/15/2010 819 KO	SM 1030E
Radio Chemistry						
Gross Alpha	30.8 ± 2.9	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	16.4 ± 2.1	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	0.4 ± 0.1	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/22/2010 2042 SH	Ra-05

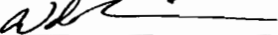
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-001
Client Sample ID: P84665W
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 10:30:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1118 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1307 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1307 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/08/2010 1118 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1307 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1118 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1307 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1118 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1307 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 913 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1307 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1118 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/07/2010 1307 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1307 MS	EPA 200.8
Uranium	0.056	0.001		mg/L	10/07/2010 1307 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1307 MS	EPA 200.8
Zinc	0.08	0.01		mg/L	10/08/2010 1118 DG	EPA 200.7
Total Metals						
Iron	0.09	0.05		mg/L	10/10/2010 1012 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/10/2010 1012 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-002
Client Sample ID: SBWELL01
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 11:10:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.08	s.u.			10/06/2010 1110	Field
Conductivity	1176	µm		hos/cm	10/06/2010 1110	Field
Dissolved Oxygen	0.92	mg		/L	10/06/2010 1110	Field
Dissolved Oxygen (pct)	8.3			%	10/06/2010 1110	Field
Turbidity	1.08	NT		U	10/06/2010 1110	Field
Temperature	10.8	°C			10/06/2010 1110	Field
General Parameters						
pH	8.7	0.1		s.u.	10/08/2010 1750 KO	SM 4500 H B
Electrical Conductivity	1140	5		µmhos/cm	10/08/2010 1750 KO	SM 2510B
Total Dissolved Solids (180)	750	10		mg/L	10/08/2010 1550 JF	SM 2540
Solids, Total Dissolved (Calc)	710	10		mg/L	10/15/2010 819 KO	SM 1030E
Alkalinity, Total (As CaCO3)	535	5		mg/L	10/08/2010 1750 KO	SM 2320B
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	10/11/2010 1538 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	592	5		mg/L	10/08/2010 1750 KO	SM 2320B
Alkalinity, Carbonate as CO3	30	5		mg/L	10/08/2010 1750 KO	SM 2320B
Chloride	ND	1		mg/L	10/08/2010 1246 KO	EPA 300.0
Fluoride	0.1	0.1		mg/L	10/08/2010 1750 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1703 AS	EPA 353.2
Sulfate	94	1		mg/L	10/08/2010 1246 KO	EPA 300.0
Cations						
Calcium	2	1		mg/L	10/08/2010 1121 DG	EPA 200.7
Magnesium	ND	1		mg/L	10/08/2010 1121 DG	EPA 200.7
Potassium	3	1		mg/L	10/08/2010 1121 DG	EPA 200.7
Sodium	288	1		mg/L	10/08/2010 1121 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

December 2010



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-002
Client Sample ID: SBWELL01
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 11:10:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.70	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Carbonate as CO ₃	0.99	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Chloride	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Fluoride	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sulfate	1.95	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Calcium	0.09	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Magnesium	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Potassium	0.06	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sodium	12.51	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	12.67	0		meq/L	10/15/2010 819 KO	SM 1030E
Anion Sum	12.66	0		meq/L	10/15/2010 819 KO	SM 1030E
Cation-Anion Balance	0.02	0		%	10/15/2010 819 KO	SM 1030E
Radio Chemistry						
Gross Alpha	2.8 ± 1.3	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	3.2 ± 1.8	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/22/2010 2042 SH	Ra-05

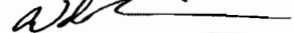
These results apply only to the samples tested.

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-002
Client Sample ID: SBWELL01
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 11:10:00 AM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1121 DG	EPA 200.7
Arsenic	0.007	0.005		mg/L	10/07/2010 1318 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1318 MS	EPA 200.8
Boron	ND	0.1		mg/L	10/08/2010 1121 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1318 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1121 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1318 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/08/2010 1121 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1318 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 915 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1318 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1121 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/07/2010 1318 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1318 MS	EPA 200.8
Uranium	0.002	0.001		mg/L	10/07/2010 1318 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1318 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1121 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/10/2010 1017 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/10/2010 1017 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-006
Client Sample ID: SBWELL02
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 1:30:00 PM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.15	s.u.			10/06/2010 1330	Field
Conductivity	1043	µm		hos/cm	10/06/2010 1330	Field
Dissolved Oxygen	2.36	mg		/L	10/06/2010 1330	Field
Dissolved Oxygen (pct)	21.1			%	10/06/2010 1330	Field
Turbidity	0.94	NT		U	10/06/2010 1330	Field
Temperature	10.4	°C			10/06/2010 1330	Field
General Parameters						
pH	8.3	0.1		s.u.	10/08/2010 1857 KO	SM 4500 H B
Electrical Conductivity	1010	5		µmhos/cm	10/08/2010 1857 KO	SM 2510B
Total Dissolved Solids (180)	650	10		mg/L	10/08/2010 1615 JF	SM 2540
Solids, Total Dissolved (Calc)	620	10		mg/L	10/15/2010 819 KO	SM 1030E
Alkalinity, Total (As CaCO3)	488	5		mg/L	10/08/2010 1857 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	10/11/2010 1542 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	595	5		mg/L	10/08/2010 1857 KO	SM 2320B
Alkalinity, Carbonate as CO3	ND	5		mg/L	10/08/2010 1857 KO	SM 2320B
Chloride	1	1		mg/L	10/08/2010 1322 KO	EPA 300.0
Fluoride	0.2	0.1		mg/L	10/08/2010 1857 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1713 AS	EPA 353.2
Sulfate	78	1		mg/L	10/08/2010 1322 KO	EPA 300.0
Cations						
Calcium	19	1		mg/L	10/08/2010 1137 DG	EPA 200.7
Magnesium	11	1		mg/L	10/08/2010 1137 DG	EPA 200.7
Potassium	12	1		mg/L	10/08/2010 1137 DG	EPA 200.7
Sodium	205	1		mg/L	10/08/2010 1137 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-006
Client Sample ID: SBWELL02
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 1:30:00 PM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	9.75	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Chloride	0.02	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Fluoride	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sulfate	1.62	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Calcium	0.96	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Magnesium	0.90	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Potassium	0.29	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Sodium	8.92	0.01		meq/L	10/15/2010 819 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	11.07	0		meq/L	10/15/2010 819 KO	SM 1030E
Anion Sum	11.41	0		meq/L	10/15/2010 819 KO	SM 1030E
Cation-Anion Balance	1.50	0		%	10/15/2010 819 KO	SM 1030E
Radio Chemistry						
Gross Alpha	2.7 ± 1.2	2		pCi/L	10/24/2010 1109 SH	SM 7110B
Gross Beta	7.6 ± 1.9	3		pCi/L	10/24/2010 1109 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/20/2010 847 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/23/2010 1851 SH	Ra-05

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/28/2010
Report ID: S1010105001

Project: ROSS
Lab ID: S1010105-006
Client Sample ID: SBWELL02
COC: 131172

Work Order: S1010105
Collection Date: 10/6/2010 1:30:00 PM
Date Received: 10/6/2010 4:00:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/08/2010 1137 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/07/2010 1332 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/07/2010 1332 MS	EPA 200.8
Boron	0.2	0.1		mg/L	10/08/2010 1137 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/07/2010 1332 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/08/2010 1137 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/07/2010 1332 MS	EPA 200.8
Iron	0.06	0.05		mg/L	10/08/2010 1137 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/07/2010 1332 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 925 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/07/2010 1332 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/08/2010 1137 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/07/2010 1332 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/07/2010 1332 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/07/2010 1332 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/07/2010 1332 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/08/2010 1137 DG	EPA 200.7
Total Metals						
Iron	0.12	0.05		mg/L	10/10/2010 1034 DG	EPA 200.7
Manganese	0.04	0.02		mg/L	10/10/2010 1034 DG	EPA 200.7

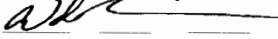
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-005
Client Sample ID: TW01
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 10:45:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.42	s.u.			10/05/2010 1045	Field
Conductivity	1916	µm		hos/cm	10/05/2010 1045	Field
Dissolved Oxygen	1.03	mg		/L	10/05/2010 1045	Field
Dissolved Oxygen (pct)	10.1			%	10/05/2010 1045	Field
Turbidity	1.35	NT		U	10/05/2010 1045	Field
Temperature	13.2	°C			10/05/2010 1045	Field
General Parameters						
pH	8.5	0.1		s.u.	10/06/2010 2341 KO	SM 4500 H B
Electrical Conductivity	2020	5		µmhos/cm	10/06/2010 2341 KO	SM 2510B
Total Dissolved Solids (180)	1360	10		mg/L	10/07/2010 1355 JF	SM 2540
Solids, Total Dissolved (Calc)	870	10		mg/L	10/15/2010 1447 KO	SM 1030E
Alkalinity, Total (As CaCO3)	689	5		mg/L	10/06/2010 2341 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	10/11/2010 1528 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	793	5		mg/L	10/06/2010 2341 KO	SM 2320B
Alkalinity, Carbonate as CO3	23	5		mg/L	10/06/2010 2341 KO	SM 2320B
Chloride	4	1		mg/L	10/06/2010 2107 KO	EPA 300.0
Fluoride	1.2	0.1		mg/L	10/08/2010 1421 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1659 AS	EPA 353.2
Sulfate	375	1		mg/L	10/06/2010 2107 KO	EPA 300.0
Cations						
Calcium	8	1		mg/L	10/06/2010 1543 DG	EPA 200.7
Magnesium	4	1		mg/L	10/06/2010 1543 DG	EPA 200.7
Potassium	8	1		mg/L	10/06/2010 1543 DG	EPA 200.7
Sodium	473	1		mg/L	10/06/2010 1543 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 

Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-005
Client Sample ID: TW01
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 10:45:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Chloride	0.11	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Fluoride	0.06	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sulfate	7.80	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Calcium	0.40	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Magnesium	0.35	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Potassium	0.20	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sodium	20.59	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	21.56	0		meq/L	10/15/2010 1447 KO	SM 1030E
Anion Sum	21.75	0		meq/L	10/15/2010 1447 KO	SM 1030E
Cation-Anion Balance	0.44	0		%	10/15/2010 1447 KO	SM 1030E
Radio Chemistry						
Gross Alpha	4.2 ± 2.1	2		pCi/L	10/22/2010 2301 SH	SM 7110B
Gross Beta	4.4 ± 3.9	3		pCi/L	10/22/2010 2301 SH	SM 7110B
Radium 226 (Dissolved)	0.3 ± 0.1	0.2		pCi/L	10/16/2010 1528 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/22/2010 2042 SH	Ra-05

These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-005
Client Sample ID: TW01
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 10:45:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1543 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1331 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1331 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/06/2010 1543 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1331 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1543 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1331 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1543 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1331 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 854 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1331 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1543 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1331 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1331 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1331 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1331 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1543 DG	EPA 200.7
Total Metals						
Iron	0.12	0.05		mg/L	10/08/2010 1440 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/08/2010 1440 DG	EPA 200.7

These results apply only to the samples tested.

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-002
Client Sample ID: TWO2
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:30:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.25	s.u.			10/05/2010 830	Field
Conductivity	2760	µm		hos/cm	10/05/2010 830	Field
Dissolved Oxygen	1.02	mg		/L	10/05/2010 830	Field
Dissolved Oxygen (pct)	9.3			%	10/05/2010 830	Field
Turbidity	2.05	NT		U	10/05/2010 830	Field
Temperature	11.1	°C			10/05/2010 830	Field
General Parameters						
pH	8.4	0.1		s.u.	10/06/2010 2240 KO	SM 4500 H B
Electrical Conductivity	2160	5		µmhos/cm	10/06/2010 2240 KO	SM 2510B
Total Dissolved Solids (180)	1490	10		mg/L	10/07/2010 1340 JF	SM 2540
Solids, Total Dissolved (Calc)	1370	10		mg/L	10/15/2010 1447 KO	SM 1030E
Alkalinity, Total (As CaCO ₃)	632	5		mg/L	10/06/2010 2240 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	10/11/2010 1525 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO ₃	755	5		mg/L	10/06/2010 2240 KO	SM 2320B
Alkalinity, Carbonate as CO ₃	8	5		mg/L	10/06/2010 2240 KO	SM 2320B
Chloride	8	1		mg/L	10/06/2010 1950 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	10/07/2010 1904 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1656 AS	EPA 353.2
Sulfate	467	1		mg/L	10/06/2010 1950 KO	EPA 300.0
Cations						
Calcium	24	1		mg/L	10/06/2010 1529 DG	EPA 200.7
Magnesium	11	1		mg/L	10/06/2010 1529 DG	EPA 200.7
Potassium	13	1		mg/L	10/06/2010 1529 DG	EPA 200.7
Sodium	466	1		mg/L	10/06/2010 1529 DG	EPA 200.7

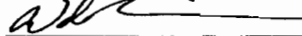
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-002
Client Sample ID: TWO2
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:30:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.37	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Carbonate as CO ₃	0.26	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Chloride	0.21	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sulfate	9.71	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Calcium	1.20	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Magnesium	0.93	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Potassium	0.33	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sodium	20.29	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	22.76	0		meq/L	10/15/2010 1447 KO	SM 1030E
Anion Sum	22.59	0		meq/L	10/15/2010 1447 KO	SM 1030E
Cation-Anion Balance	0.39	0		%	10/15/2010 1447 KO	SM 1030E
Radio Chemistry						
Gross Alpha	3.1 ± 2.3	2		pCi/L	10/22/2010 2301 SH	SM 7110B
Gross Beta	9.2 ± 4.0	3		pCi/L	10/22/2010 2301 SH	SM 7110B
Radium 226 (Dissolved)	1.1 ± 0.1	0.2		pCi/L	10/16/2010 1528 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/22/2010 2042 SH	Ra-05

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-002
Client Sample ID: TWO2
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:30:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1529 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1320 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1320 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/06/2010 1529 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1320 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1529 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1320 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1529 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1320 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 845 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1320 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1529 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1320 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1320 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1320 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1320 MS	EPA 200.8
Zinc	0.01	0.01		mg/L	10/06/2010 1529 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/08/2010 1426 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	10/08/2010 1426 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-003
Client Sample ID: FD-TW02
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:45:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	8.25	s.u.			10/05/2010 845	Field
Conductivity	2760	µm		hos/cm	10/05/2010 845	Field
Dissolved Oxygen	1.02	mg		/L	10/05/2010 845	Field
Dissolved Oxygen (pct)	9.3			%	10/05/2010 845	Field
Turbidity	2.05	NT		U	10/05/2010 845	Field
Temperature	11.1	°C			10/05/2010 845	Field
General Parameters						
pH	8.4	0.1		s.u.	10/06/2010 2252 KO	SM 4500 H B
Electrical Conductivity	2150	5		µmhos/cm	10/06/2010 2252 KO	SM 2510B
Total Dissolved Solids (180)	1450	10		mg/L	10/07/2010 1345 JF	SM 2540
Solids, Total Dissolved (Calc)	1370	10		mg/L	10/15/2010 1447 KO	SM 1030E
Alkalinity, Total (As CaCO3)	630	5		mg/L	10/06/2010 2252 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.4	0.1		mg/L	10/11/2010 1526 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	749	5		mg/L	10/06/2010 2252 KO	SM 2320B
Alkalinity, Carbonate as CO3	9	5		mg/L	10/06/2010 2252 KO	SM 2320B
Chloride	9	1		mg/L	10/06/2010 2048 KO	EPA 300.0
Fluoride	0.5	0.1		mg/L	10/07/2010 1907 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1657 AS	EPA 353.2
Sulfate	468	1		mg/L	10/06/2010 2048 KO	EPA 300.0
Cations						
Calcium	24	1		mg/L	10/06/2010 1531 DG	EPA 200.7
Magnesium	11	1		mg/L	10/06/2010 1531 DG	EPA 200.7
Potassium	13	1		mg/L	10/06/2010 1531 DG	EPA 200.7
Sodium	468	1		mg/L	10/06/2010 1531 DG	EPA 200.7

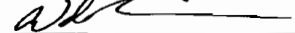
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-003
Client Sample ID: FD-TW02
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:45:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	12.28	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Carbonate as CO ₃	0.31	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Chloride	0.24	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Fluoride	0.02	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sulfate	9.74	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Calcium	1.21	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Magnesium	0.94	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Potassium	0.33	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sodium	20.37	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	22.86	0		meq/L	10/15/2010 1447 KO	SM 1030E
Anion Sum	22.60	0		meq/L	10/15/2010 1447 KO	SM 1030E
Cation-Anion Balance	0.56	0		%	10/15/2010 1447 KO	SM 1030E
Radio Chemistry						
Gross Alpha	4.0 ± 2.4	2		pCi/L	10/22/2010 2301 SH	SM 7110B
Gross Beta	11.5 ± 4.1	3		pCi/L	10/22/2010 2301 SH	SM 7110B
Radium 226 (Dissolved)	0.5 ± 0.1	0.2		pCi/L	10/16/2010 1528 SH	SM 7500-Ra B
Radium 228 (Dissolved)	1.6 ± 1.2	1		pCi/L	10/22/2010 2042 SH	Ra-05

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-003
Client Sample ID: FD-TW02
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 8:45:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1531 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1323 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1323 MS	EPA 200.8
Boron	0.4	0.1		mg/L	10/06/2010 1531 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1323 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1531 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1323 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1531 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1323 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 847 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1323 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1531 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1323 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1323 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1323 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1323 MS	EPA 200.8
Zinc	0.02	0.01		mg/L	10/06/2010 1531 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/08/2010 1428 DG	EPA 200.7
Manganese	0.03	0.02		mg/L	10/08/2010 1428 DG	EPA 200.7

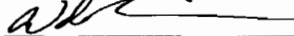
These results apply only to the samples tested.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-006
Client Sample ID: TW WELL03
COC: 131170

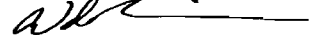
Work Order: S1010075
Collection Date: 10/5/2010 11:20:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Field						
pH	9.07	s.u.			10/05/2010 1120	Field
Conductivity	1437	µm		hos/cm	10/05/2010 1120	Field
Dissolved Oxygen	7.50	mg		/L	10/05/2010 1120	Field
Dissolved Oxygen (pct)	67.6			%	10/05/2010 1120	Field
Turbidity	0.90	NT		U	10/05/2010 1120	Field
Temperature	10.9	°C			10/05/2010 1120	Field
General Parameters						
pH	8.7	0.1		s.u.	10/06/2010 2351 KO	SM 4500 H B
Electrical Conductivity	1490	5		µmhos/cm	10/06/2010 2351 KO	SM 2510B
Total Dissolved Solids (180)	970	10		mg/L	10/07/2010 1400 JF	SM 2540
Solids, Total Dissolved (Calc)	570	10		mg/L	10/15/2010 1447 KO	SM 1030E
Alkalinity, Total (As CaCO3)	596	5		mg/L	10/06/2010 2351 KO	SM 2320B
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	10/11/2010 1529 AS	EPA 350.1
Anions						
Alkalinity, Bicarbonate as HCO3	657	5		mg/L	10/06/2010 2351 KO	SM 2320B
Alkalinity, Carbonate as CO3	35	5		mg/L	10/06/2010 2351 KO	SM 2320B
Chloride	2	1		mg/L	10/06/2010 2117 KO	EPA 300.0
Fluoride	1.5	0.1		mg/L	10/08/2010 1424 KO	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	10/12/2010 1700 AS	EPA 353.2
Sulfate	195	1		mg/L	10/06/2010 2117 KO	EPA 300.0
Cations						
Calcium	3	1		mg/L	10/06/2010 1545 DG	EPA 200.7
Magnesium	2	1		mg/L	10/06/2010 1545 DG	EPA 200.7
Potassium	4	1		mg/L	10/06/2010 1545 DG	EPA 200.7
Sodium	360	1		mg/L	10/06/2010 1545 DG	EPA 200.7

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	L Analyzed by a contract laboratory
	M Value exceeds Monthly Ave or MCL	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	S Spike Recovery outside accepted recovery limits

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

December 2010

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Addendum 2.7-J



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-006
Client Sample ID: TW WELL03
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 11:20:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Cation/Anion-Milliequivalents						
Bicarbonate as HCO ₃	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Carbonate as CO ₃	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Chloride	0.05	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Fluoride	0.07	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Nitrate + Nitrite as N	ND	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sulfate	4.07	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Calcium	0.14	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Magnesium	0.12	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Potassium	0.10	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Sodium	15.64	0.01		meq/L	10/15/2010 1447 KO	SM 1030E
Cation / Anion Balance						
Cation Sum	16.01	0		meq/L	10/15/2010 1447 KO	SM 1030E
Anion Sum	16.12	0		meq/L	10/15/2010 1447 KO	SM 1030E
Cation-Anion Balance	0.34	0		%	10/15/2010 1447 KO	SM 1030E
Radio Chemistry						
Gross Alpha	6.7 ± 2.4	2		pCi/L	10/22/2010 2301 SH	SM 7110B
Gross Beta	6.9 ± 3.9	3		pCi/L	10/22/2010 2301 SH	SM 7110B
Radium 226 (Dissolved)	ND	0.2		pCi/L	10/16/2010 1528 SH	SM 7500-Ra B
Radium 228 (Dissolved)	ND	1		pCi/L	10/22/2010 2042 SH	Ra-05

These results apply only to the samples tested.

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RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

CLIENT: Western Water Consultants
1849 Terra Avenue
Sheridan, WY 82801

Date Reported: 10/26/2010
Report ID: S1010075001

Project: ROSS
Lab ID: S1010075-006
Client Sample ID: TW WELL03
COC: 131170

Work Order: S1010075
Collection Date: 10/5/2010 11:20:00 AM
Date Received: 10/5/2010 4:26:00 PM
Sampler: RF
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
Dissolved Metals						
Aluminum	ND	0.1		mg/L	10/06/2010 1545 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	10/06/2010 1334 MS	EPA 200.8
Barium	ND	0.5		mg/L	10/06/2010 1334 MS	EPA 200.8
Boron	0.5	0.1		mg/L	10/06/2010 1545 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	10/06/2010 1334 MS	EPA 200.8
Chromium	ND	0.01		mg/L	10/06/2010 1545 DG	EPA 200.7
Copper	ND	0.01		mg/L	10/06/2010 1334 MS	EPA 200.8
Iron	ND	0.05		mg/L	10/06/2010 1545 DG	EPA 200.7
Lead	ND	0.02		mg/L	10/06/2010 1334 MS	EPA 200.8
Mercury	ND	0.001		mg/L	10/12/2010 856 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	10/06/2010 1334 MS	EPA 200.8
Nickel	ND	0.01		mg/L	10/06/2010 1545 DG	EPA 200.7
Selenium	ND	0.005		mg/L	10/06/2010 1334 MS	EPA 200.8
Silver	ND	0.003		mg/L	10/06/2010 1334 MS	EPA 200.8
Uranium	ND	0.001		mg/L	10/06/2010 1334 MS	EPA 200.8
Vanadium	ND	0.02		mg/L	10/06/2010 1334 MS	EPA 200.8
Zinc	ND	0.01		mg/L	10/06/2010 1545 DG	EPA 200.7
Total Metals						
Iron	ND	0.05		mg/L	10/08/2010 1442 DG	EPA 200.7
Manganese	ND	0.02		mg/L	10/08/2010 1442 DG	EPA 200.7


These results apply only to the samples tested.

Qualifiers:

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Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager

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