

*Application for Amendment of USNRC Source  
Materials License SUA-1601, Ross ISR Project*

*Kendrick Expansion Area,  
Crook County, Wyoming  
Docket #40-9091*

Environmental Report  
Addendum 3.4-K

*March 2015*



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**ADDENDUM 3.4-K**  
**GROUNDWATER QUALITY MONITORING FIELD SHEETS**  
**AND LABORATORY REPORTS**

## SAMPLING INFORMATION

Sampling Point 5367-34-060Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5367-34-060Z Date Sampled 3 129 13 Time 1545 am pm  
Describe Sampling Point GW monitoring well

Well Depth 320 ft below MP Depth to Water (below MP) 66.55 ft Casing Diameter 5 in  
Date 3 129 13 Time 1405 am pm Casing Volume 254 x 3  
762 gal

At least 3+ 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: Rubber 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 N/A

### DISCHARGE RATE

30 gpm  
x 0.00223  
0.07 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1420	—	Started pump			—	—	—	—	↓ 2550	30
1440	9.03	1806	10.6	9.41	—	—	—	—		30
1530	8.93	1831	10.6	4.15	—	—	—	—		30
1545	8.93	1824	10.6	3.06	+64	3.34	31.2	—		30

Pumping Start Time 1420 WL \_\_\_\_\_ Pumping End Time 1630 WL \_\_\_\_\_

Comments: Water clear - no odor - IML Quote # 356

LCF - COC # 143951

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5367-34-065M Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 5367-34-065M Date Sampled 3/29/13 Time 1615 am ☒ pm  
 Describe Sampling Point GW monitoring well

Well Depth 220 ft below MP Depth to Water (below MP) 59.60 ft Casing Diameter 5 in  
 Date 3/29/13 Time 1410 am ☒ pm Casing Volume 160X3 gal  
480

At least 3+ bore volumes have been evacuated before sampling

Sampling method

Submersible pump 1 1/2 hp

Tap

Bailer

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

10 gpm  
 x 0.00223  
0.02 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1420	—	started pump								10
1450	9.97	1934	10.5	4.38					300	10
1520	9.56	1875	10.4	5.27					600	10
1615	9.38	1860	10.4	12.50	+49	1.81	16.5		1150	10

Pumping Start Time 1420 WL \_\_\_\_\_ Pumping End Time 1630 WL \_\_\_\_\_  
 Comments: Water clear - no odor - IML Quote #356

LCF - COC # 148987

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5367-34-06SA Project Kendrick  
Location 5367, sec. 6, SWSE W.O.# 2012145-24  
Sample ID# 5367-34-06SA Date Sampled 3 / 26 / 13 Time 0920 am pm  
Describe Sampling Point Plastic tubing

Well Depth 55 ft below MP Depth to Water (below MP) 21.37 ft Casing Diameter 5 in  
Date 3 / 26 / 13 Time 0840 am pm Casing Volume \_\_\_\_\_ g al

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

Sampling method Submersible pump

Bladder

Tap

Bailer

Pump intake or bailer set at 50 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

\_\_\_\_\_ gp m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0900	8.21	2630	6.0	8.84	_____	_____	_____	_____	↓	150 ml / 30 sec
0910	8.33	2660	5.5	5.81	_____	_____	_____	_____	↓	↓
0920	8.33	2660	5.4	4.62	+21	1.79	14.6	_____	≈ 5.0	↓

Pumping Start Time 0850 WL \_\_\_\_\_ Pumping End Time 0930 WL \_\_\_\_\_

Comments: Water clear - no odor - Imb Quote # 356 -

LCF - COC# 148998

Form completed by:

Bob Fuller

Witnessed by:



## SAMPLING INFORMATION

Sampling Point 5368-43-120Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-43-120Z Date Sampled 3 / 28 / 13 Time 1600 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 615 ft below MP Depth to Water (below MP) 247.31 ft Casing Diameter 5 in  
Date 3 / 28 / 13 Time 1400 am ☒ pm Casing Volume 367X3 gal  
1100

At least 3+ 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: Rubber 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 N/A

### DISCHARGE RATE

15 gpm  
x 0.00223  
0.03 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1430</u>										<u>15.0</u>
<u>1500</u>	<u>9.40</u>	<u>3430</u>	<u>12.0</u>	<u>1.25</u>						<u>15.0</u>
<u>1530</u>	<u>9.23</u>	<u>3410</u>	<u>12.0</u>	<u>0.51</u>					<u>900</u>	<u>15.0</u>
<u>1600</u>										
<u>1600</u>	<u>9.18</u>	<u>3410</u>	<u>12.0</u>	<u>0.12</u>	<u>-44</u>	<u>2.02</u>	<u>19.4</u>	<u>-</u>	<u>1350</u>	<u>15.0</u>

Pumping Start Time 1430 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - Inlet Quote #356 -

LCF - COC# 143951

Form completed by:

Don Fuller

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-43-125M Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 5368-43-125M Date Sampled 3/28/13 Time 1700 am ☒ pm  
 Describe Sampling Point GW monitoring well

Well Depth 480 ft below MP Depth to Water (below MP) 191.66 ft  
 Date 3/28/13 Time 1405 am ☒ pm

Casing Diameter 5 in  
 Casing Volume 288x3 = 865 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method Submersible pump 1 1/2'  
 ' Tap \_\_\_\_\_ ' Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

6 gpm  
 x 0.00223  
0.01 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1430										6.0
1545	9.84	1708	11.7	3.65						6.0
1630	9.46	1661	11.4	0.45						6.0
1700	9.39	1720	11.5	0.44	-69	0.75	7.1	-	900	6.0

Pumping Start Time 1430 WL \_\_\_\_\_ Pumping End Time 1710 WL \_\_\_\_\_

Comments: Water clear - no odor - Imb Quote #356

LCF - COC# 143951

Form completed by: Dod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-33-140Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-33-140Z Date Sampled 3 129 113 Time 1230 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 760 ft below MP Depth to Water (below MP) 225.48 ft Casing Diameter 5 in  
Date 3 129 113 Time 0925 (am) pm Casing Volume 535 83 gal  
1605

At least 3+ 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: Rubber 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 n/A

### DISCHARGE RATE

15 gpm  
x 0.00223  
0.03 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0940	—	Started pumping				—	—	—	—	15.0
1030	9.69	1499	12.2	5.18	—	—	—	—	—	15
1100	9.54	1498	12.3	7.26	—	—	—	—	—	15
1130	9.43	1499	12.5	12.88	—	—	—	—	—	15
1230	9.32	1458	12.4	18.14	-35	2.09	20.2	—	2550	15

Pumping Start Time 0940 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor - IML Quote #356

LCF - COC#143951

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-33-14SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-33-14SM Date Sampled 3 129 113 Time 1330 am pm  
Describe Sampling Point GW monitoring well

Well Depth 630 ft below MP Depth to Water (below MP) 179 ft Casing Diameter 5 in  
Date 3 129 113 Time 0920 am pm Casing Volume 451x3 gal  
1351

At least 3+ bore volumes have been evacuated before sampling

Sampling method

Submersible pump 1 1/2 hp

Tap

Bailer

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

6.0 gpm  
x 0.00223  
0.01 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0940	-	Started pumping								8.0
1040	11.47	1864	11.8	14.56					480	6.0
1140	10.41	1581	12.3	7.92					840	
<sup>50</sup> <del>1230</del>	10.06	1479	12.3	7.24					1140	
1330	9.85	1437	12.5	2.25	-5	1.09	10.4	-	1500	

Pumping Start Time 0940 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - FML Quote # 356

LCE - COC # 143951

Form completed by:

Bob Fulmer

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-33-145A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-33-145A Date Sampled 3/12/13 Time 1340 am ☒ pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 65 ft below MP Depth to Water (below MP) 31.13 ft Casing Diameter 5 in  
Date 3/12/13 Time 1300 am pm Casing Volume N/A gal

At least N/A bore volumes have been evacuated before sampling  
Sampling method ☐ Submersible pump ☒ Bladder  
☐ Tap ☐ Bailer \_\_\_\_\_

DISCHARGE RATE	
_____	gpm
x <u>0.00223</u>	cfs

Pump intake or bailer set at 60 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

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1310	<u>7.54</u>	<u>Started Pump</u>		<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>150ml/30Sec.</u>
1320	<u>7.48</u>	<u>871</u>	<u>8.7</u>	<u>8.22</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>
1330	<u>7.59</u>	<u>871</u>	<u>9.2</u>	<u>5.97</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>
1340	<u>7.61</u>	<u>853</u>	<u>9.3</u>	<u>4.86</u>	<u>-2</u>	<u>1.53</u> <u>13.8</u>	<u>_____</u>	<u>≈ 5.0</u>	<u>✓</u>

Pumping Start Time 1310 WL \_\_\_\_\_ Pumping End Time 1350 WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles -  
ImL Quote # 356  
LCF - COC # 143948

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-41-23 02 Project Kendricks  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-41-23 02 Date Sampled 4 12 13 Time 1410 am ☒ pm  
Describe Sampling Point 6W monitoring well

Well Depth 800 ft below MP Depth to Water (below MP) 272.18 ft Casing Diameter 5 in  
Date 4 12 13 Time 1035 ☒ am ☐ pm Casing Volume 528 x 3 gal  
1584

At least 3+ 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: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1100	—	Started pump				—	—	—	—	10
1200	9.08	1422	12.4	793	—	—	—	—	600	8
1300	9.13	1425	12.4	<del>824</del> 430	—	—	—	—	1080	8
1410	9.18	1439	12.4	196	-69	1.95	18.8	—	<del>1560</del> 1640	8

Pumping Start Time 1100 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - IWL Quote #356

HCF-COC# 148997

Form completed by:

Bob Fuller

Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-41-235M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-41-235M Date Sampled 4 12 13 Time 1330 am ☒ pm  
Describe Sampling Point 6W monitoring well

Well Depth 710 ft below MP Depth to Water (below MP) 238.85 ft Casing Diameter 5 in  
Date 4 12 13 Time 1040 ☒ am ☐ pm Casing Volume 470x3 gal  
1410

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method

Submersible pump 1 1/2 hp

Tap

Bailer

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1100	—	Started pump								10
1230	8.99	1483	11.8	62.9					900	10
1330	8.95	1453	11.8	17.49	-86	2.01	19.5	—	1500	10

Pumping Start Time 1100 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor - Impl Quote #356

HCF - COC # 148997

Form completed by:

Bob Fuller

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-41-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-41-235A Date Sampled 3 / 12 / 13 Time 1200 am (pm)  
Describe Sampling Point \_\_\_\_\_

Well Depth 90 ft below MP Depth to Water (below MP) 83.10 ft Casing Diameter 5 in  
Date 3 / 12 / 13 Time 1115 (am) pm Casing Volume N/A ga

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

Sampling method Submersible pump Bladder  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 85 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1130	—	Started	—	pump	—	—	—	—	150ml/30sec
1140	7.20	1242	6.2	293	—	—	—	—	—
1150	7.10	1239	6.8	124	—	—	—	—	—
1200	7.03	1237	7.6	71.4	+146	1.68 14.4	—	≈5.0	↓

Pumping Start Time 1130 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - 7 sample bottles -  
ImL Quote #356  
HCF - COC#

Form completed by: Rod Jule Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5368-24-120Z Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 5368-24-120Z Date Sampled 3/28/13 Time 1330 am ☒ pm  
 Describe Sampling Point GW monitoring well

Well Depth 780 ft below MP Depth to Water (below MP) 309.78 ft Casing Diameter 5 in  
 Date 3/28/13 Time 1030 ☒ am ☐ pm Casing Volume 470 x 3  
1410 gal

At least 3 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: Rubber 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 N/A

### DISCHARGE RATE

10 gpm  
 x 0.00223  
0.02 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1100</u>										<u>10 GPM</u>
<u>1200</u>	<u>9.58</u>	<u>1673</u>	<u>12.7</u>	<u>2.14</u>					<u>600</u>	<u>10</u>
<u>1300</u>	<u>9.30</u>	<u>1783</u>	<u>12.9</u>	<u>5.29</u>					<u>1200</u>	<u>10</u>
<u>1330</u>	<u>9.31</u>	<u>1794</u>	<u>12.5</u>	<u>1.17</u>	<u>-8</u>	<u>1.38</u>	<u>13.2</u>		<u>1500</u>	<u>10</u>

Pumping Start Time 1100 WL \_\_\_\_\_ Pumping End Time 1340 WL \_\_\_\_\_

Comments: Water Clear - no odor - IML Quote # 356

LCF - COC# 143951

Form completed by:

Bob Fuller

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-24-125M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-24-125M Date Sampled 3/28/13 Time 1315 am ☒ pm  
Describe Sampling Point 6W monitoring well

Well Depth 600 ft below MP Depth to Water (below MP) 247.97 ft Casing Diameter 5 in  
Date 3/28/13 Time 1035 ☒ am ☐ pm Casing Volume 352 x 3 gal  
1056

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump 1 1/2 hp  
' Tap \_\_\_\_\_ ' Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

8 gpm  
x 0.00223  
0.02 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1100</u>										<u>8 GPM</u>
<u>1230</u>	<u>9.38</u>	<u>1330</u>	<u>12.0</u>	<u>147</u>					<u>240</u>	<u>8</u>
<u>1230</u>	<u>9.37</u>	<u>1338</u>	<u>12.3</u>	<u>76.6</u>					<u>720</u>	<u>8</u>
<u>1315</u>	<u>9.31</u>	<u>1353</u>	<u>12.2</u>	<u>42.6</u>	<u>-53</u>	<u>0.99</u>	<u>9.6</u>	<u>-</u>	<u>1080</u>	<u>8</u>

Pumping Start Time 1100 WL \_\_\_\_\_ Pumping End Time 1340 WL \_\_\_\_\_

Comments: Water slightly turbid - no odor - IM Quote # 356  
HCF - COC # 143951

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-24-12SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-24-12SA Date Sampled 3 11 13 Time 1345 am (pm)  
Describe Sampling Point \_\_\_\_\_

Well Depth 125 ft below MP Depth to Water (below MP) 79.00 ft Casing Diameter 5 in  
Date 3 11 13 Time 1215 am (pm) Casing Volume \_\_\_\_\_ ga  
l

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

Sampling method ' Submersible pump ' Bladder  
' Tap ' Bailer \_\_\_\_\_

Pump intake or bailer set at ~115 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1315	Started pumping								150 mL/30 sec
1325	9.43	1113	7.7	43.2				↓	↓
1335	9.32	1095	8.3	36.6				↓	↓
1345	9.36	1085	8.9	34.6	+49	$\frac{1.56}{13.8}$		~6.0	↓

Pumping Start Time 1315 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL 1415

Comments: water slightly turbid - no odor - 7 sample bottles - IML Quote #356  
LCF - COC# 143948

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-43-24 02 Project Kendrick  
 Location 53,68, Sec 24, SWNE W.O.# 2012145-24  
 Sample ID# 5368-43-2402 Date Sampled 3 125 / 13 Time 1500 am ☒ pm  
 Describe Sampling Point water hose

Well Depth 590 ft below MP Depth to Water (below MP) 238.24 ft Casing Diameter 5 in  
 Date 3 125 / 13 Time 1325 am ☒ pm Casing Volume 350 x 3 = 1050 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump 2hp

' Tap

' Bailer

Pump intake or bailer set at 2580 ft below MP.

Tubing (type: Rubber). (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

15 gpm  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1400	9.88	1829	10.9	775					375	15
1430	9.51	1820	11.1	174					<del>795</del> <del>825</del>	14
1500	9.43	1827	10.4	108	+52	1.42	13.0		<del>1155</del> <del>1275</del>	12

Pumping Start Time 1335 WL N/A Pumping End Time 1510 WL N/A

Comments: No dolo valve - water turbid but clearing - no odor - Impl Quote #356 - HCF - COC# 148998

Form completed by:

Red Fuller

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-43-245M Project Kendrick  
Location 53, 68, Sec. 24, SWNE W.O.# 2012145-24  
Sample ID# 5368-43-245M Date Sampled 3 / 25 / 13 Time 1805 am ☒ pm  
Describe Sampling Point water hose (rubber)

Well Depth 458 ft below MP Depth to Water (below MP) 147.28 ft Casing Diameter 5 in  
Date 3 / 25 / 13 Time 1530 am ☒ pm Casing Volume 310 X 3 = 930 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method

Submersible pump 1 1/2 HP

' Tap

' Bailer

Pump intake or bailer set at ~450 ft below MP.

Tubing (type: Rubber). (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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1635	8.79	1787	11.1	12.19	—	—	—	—	375	6.25
1735	8.77	1763	11.2	9.81	—	—	—	—	750	↓
1805	8.84	1729	10.7	7.75	-37	0.92	8.6	—	938	↓

Pumping Start Time 1535 WL \_\_\_\_\_ Pumping End Time 1810 WL \_\_\_\_\_

Comments: B GPM dose value - water clear - no odor - IML

Quote # 356 - LCF - COC # 148998

Form completed by:

[Signature]

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-43-245A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-43-245A Date Sampled 3 11 13 Time 1555 am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 45 ft below MP Depth to Water (below MP) 30.85 ft Casing Diameter 5 in  
Date 3 11 13 Time 1510 am pm Casing Volume \_\_\_\_\_ gal

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

Sampling method ' Submersible pump ' Bladder  
' Tap ' Bailer \_\_\_\_\_

Pump intake or bailer set at 40 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1525	_____	_____	_____	_____	_____	_____	_____	_____	150 ml/30 sec
1535	7.95	866	6.5	7.86	_____	_____	_____	_____	↓
1545	7.88	806	6.3	22.5	_____	_____	_____	_____	↓
1555	7.84	810	6.9	25.2	+202	3.07 26.0	_____	25.5	↓

Pumping Start Time 1525 WL \_\_\_\_\_ Pumping End Time 1610 WL \_\_\_\_\_

Comments: Water slightly turbid - no odor - 7 sample bottles -  
ImL Quote # 356 - LCF  
COC.#

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-32-230Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-32-230Z Date Sampled 4 13 113 Time 1335 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 910 ft below MP Depth to Water (below MP) 363.05 ft Casing Diameter 5 in  
Date 4 13 113 Time 1000 ☒ am ☐ pm Casing Volume 54783 gal  
1641

At least 3 bore volumes have been evacuated before sampling

Sampling method Submersible pump 2hp ~~Electric pump~~

' Tap \_\_\_\_\_ ' Bailer \_\_\_\_\_

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1030	—	—	—	Started pump	—	—	—	—	—	9.0
1130	9.94	1259	13.0	9.95	—	—	—	—	540	9.0
1230	9.57	1270	12.9	3.41	—	—	—	—	1080	9.0
1335	9.50	1308	12.7	2.76	-38	1.03	9.8	—	1665	9.0

Pumping Start Time 1030 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - IML Quote # 356

LCF - COC# 148988

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-32-235M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-32-235M Date Sampled 4 / 3 / 13 Time 1310 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 750 ft below MP Depth to Water (below MP) 320.12 ft Casing Diameter 5 in  
Date 4 / 3 / 13 Time 1005 ☒ am pm Casing Volume 430X5  
1290 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method

Submersible pump 1 1/2

' Tap

' Bailer

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1030	—	Started pump.				—	—	—	—	8.0
1200	9.60	1415	12.2	3.63	—	—	—	—	720	8.0
1300	9.54	1396	12.6	1.47	-85	1.12	10.6	—	1280	8.0

Pumping Start Time 1030 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - Imb Quote # 356

LCF - COC # 148988

Form completed by:

[Signature]

Witnessed by:

\_\_\_\_\_





WWCENGINEERING

*\* No Sample - no Access*

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

## SAMPLING INFORMATION

Sampling Point 5368-32-23SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 3/12/13 Time \_\_\_\_\_ am pm  
Describe Sampling Point \_\_\_\_\_

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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No Access

Form completed by: \_\_\_\_\_ Witnessed by: \_\_\_\_\_



\* No Sample

WWCENGINEERING

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Sheridan, Wyoming 82801  
(307) 672-0761

## SAMPLING INFORMATION

Sampling Point 5368-32-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 4-1-15 Time \_\_\_\_\_ am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 130 ft below MP Depth to Water (below MP) 127.84 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - not enough water in well to sample

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-41-360Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-41-360Z Date Sampled 3 12 12 2013 Time 1630 am ☒ pm  
Describe Sampling Point Groundwater monitoring well

Well Depth 720 ft below MP Depth to Water (below MP) 363.65 ft Casing Diameter 5 in  
Date 3 12 6 1 13 Time 1435 am ☒ pm Casing Volume 366 x 3 = 1068 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method

Submersible pump 2hp

Tap

Bailer

Pump intake or bailer set at 0.00 ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1245	9.75	1516	12.3	746	—	—	—	—	220	4.0
1350	9.30	1503	11.7	+1000	—	—	—	—	480	4.0
1450	9.15	1528	12.2	294	—	—	—	—	720	4.0
1550	9.14	1503	12.0	134	—	—	—	—	960	4.0
1630	9.11	1546	12.3	284	+24	1.08	10.5	—	1080	4.0

Pumping Start Time 1150 WL 363.65 Pumping End Time 1640 WL —

Comments: Well would not pump.

HCF - COC# 143950

Form completed by:

Red Fuller

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-41-365M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-41-365M Date Sampled 3/27/13 Time 1330 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 585 ft below MP Depth to Water (below MP) 321.18 ft Casing Diameter 5 in  
Date 3/26/13 Time 1440 am ☒ pm Casing Volume 26583 gal  
792

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method Submersible pump 1 1/2 hp  
' Tap \_\_\_\_\_ ' Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 n/A

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1150										8.0
1215	Pumped off - Let Recharge -								200	8.0
1320	Restarted pump -									8.0
1330	10.52	1245	10.6	987	+41	1.18	10.9		<del>240</del>	
1350	Pumped off -								<u>240</u> <u>540</u>	

Pumping Start Time 1150 WL \_\_\_\_\_ Pumping End Time 1350 WL \_\_\_\_\_

Comments: Calculated that this well only produces 1 to 1 1/2 GPM -  
Water turbid - no odor - Imb Quote #356  
HCF - COC# 143950

Form completed by: [Signature] Witnessed by: \_\_\_\_\_



WWCENGINEERING

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(307) 672-0761

## SAMPLING INFORMATION

Sampling Point 5368-41-365A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-41-365A Date Sampled Dry 1 Time \_\_\_\_\_ am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 120 ft below MP Depth to Water (below MP) Dry ft Casing Diameter \_\_\_\_\_ in  
Date 3 11 2013 Time 1430 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Dry

Form completed by: \_\_\_\_\_ Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-31-350Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-31-350Z Date Sampled 4 / 5 / 13 Time 1200 am pm  
Describe Sampling Point GW monitoring well

Well Depth 990 ft below MP Depth to Water (below MP) 446.07 ft Casing Diameter 5 in  
Date 4 / 5 / 13 Time 0830 am pm Casing Volume 544 x 3  
1632 gal

At least 3+ 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: Rubber 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 n/a

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0900	—	—	—	—	—	—	—	—	—	10
1000	9.13	1265	12.9	31.8	—	—	—	—	600	10
1100	9.00	1297	13.0	13.89	—	—	—	—	1200	10
1200	9.03	1286	13.2	7.80	+82	1.78	17.7	—	1800	10

Pumping Start Time 0900 WL \_\_\_\_\_ Pumping End Time 1210 WL \_\_\_\_\_  
Comments: Water clear - no odor - IML Quote #356

LCF - COC #148989

Form completed by:

Bob Fuller

Witnessed by:

## SAMPLING INFORMATION

Sampling Point 5368-31-355M Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 5368-31-355M Date Sampled 4 / 5 / 13 Time 1400 am pm  
 Describe Sampling Point \_\_\_\_\_

Well Depth 875 ft below MP Depth to Water (below MP) 435.25 ft Casing Diameter 5 in  
 Date 4 / 5 / 13 Time 0835 am pm Casing Volume 440X3 gal  
1320

At least See Comment bore volumes have been evacuated before sampling

Sampling method Submersible pump 1 1/2'  
 Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
 m  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0900	—	—	—	—	—	—	—	—	—	4.0
1030	10.24	1307	12.7	348	—	—	—	—	360	3.0
1230	9.66	1405	13.4	58.0	—	—	—	—	660	2.5
1330	9.46	<del>1417</del>	13.6	11.53	—	—	—	—	—	—
1400	9.52	1415	13.2	10.14	+31	1.59	15.8	—	—	—

Pumping Start Time 0900 WL \_\_\_\_\_ Pumping End Time 1420 WL \_\_\_\_\_

Comments: Water clear - no odor - FML Quota #356. - Did not pump 3 bore volumes out of this well, but felt comfortable grabbing sample based on consistent field parameters with SM wells in the same area and believe that the sample represents the SM aquifer -

LCF - COC# 148789  
 Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-31-35 SA Project Kendrick  
 Location \_\_\_\_\_ W.O.# \_\_\_\_\_  
 Sample ID# 5368-31-355A Date Sampled 3/26/13 Time 1145 (am) pm  
 Describe Sampling Point Groundwater well

Well Depth 130 ft below MP Depth to Water (below MP) 102.65 ft Casing Diameter 5 in  
 Date 3/26/13 Time 1100 (am) pm Casing Volume \_\_\_\_\_ g  
 al

At least NA bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder  
 ' Tap ' Bailer \_\_\_\_\_

Pump intake or bailer set at 125 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 NA

### DISCHARGE RATE

\_\_\_\_\_ g  
 m  
 x 0.00223  
 \_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1125	9.80	1097	9.9	61.5	_____	_____	_____	_____	↓	150 mL/30 sec
1135	9.82	1085	9.7	52.1	_____	_____	_____	_____	↓	↓
1145	9.82	1065	<del>9.82</del> 10.1	41.2	-61	1.31	11.9	_____	25.0	↓

Pumping Start Time 1115 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_  
 Comments: Water slightly turbid - no odor - IML Quote # 356

HCF - COC# 148998

Form completed by: [Signature] Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5368-12-250Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-12-250Z Date Sampled 4 / 2 / 13 Time 1815 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 890 ft below MP Depth to Water (below MP) 383.68 ft Casing Diameter 5 in  
Date 4 / 2 / 13 Time 1440 am ☒ pm Casing Volume 506 x 3 gal  
1518

At least see Comment 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1505	—	Started pump				—	—	—	—	5
1630	9.56	1303	12.6	37.8	—	—	—	—	—	5
1730	9.32	1330	12.4	14.85	—	—	—	—	—	5
1815	9.23	1332	12.4	21.9	-44	1.43	13.8	—	950	5

Pumping Start Time 1505 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor - IML quote #356 - Did not pump 3 bore volumes from this well due to time constraints but felt comfortable collecting sample based on consistent field parameters with similar O2 wells in the area. - HCF - COC# 148997

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-12-25SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-12-25SM Date Sampled 4 / 2 / 13 Time 1820 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 790 ft below MP Depth to Water (below MP) 375.68 ft Casing Diameter 5 in  
Date 4 / 2 / 13 Time 1445 am ☒ pm Casing Volume 414x3 gal  
1243

At least see Comment bore volumes have been evacuated before sampling

Sampling method Submersible pump 1 1/2  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 2 ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1505	—	<u>Started pump</u>								5
1600	10.65	1341	12.3	62.1						5
1700	9.95	1253	12.3	833						5
1820	9.97	1288	12.1	346	-62	1.30	12.7	—		5

Pumping Start Time 1505 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - Impl Quote #356 - Did not pump 3 bore volumes from this well due to time constraints but felt comfortable collecting sample based on consistent field parameters with similar SM wells in the area - HCF - COC# 148997

Form completed by: \_\_\_\_\_ Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-12-25SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-12-25SA Date Sampled 3 127/13 Time 0920 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 100 ft below MP Depth to Water (below MP) 68.12 ft Casing Diameter 5 in  
Date 3 127/13 Time 0830 (am) pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap Bailer \_\_\_\_\_

Pump intake or bailer set at 95 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 NA

### DISCHARGE RATE

NA gp  
m  
x 0.00223  
NA cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0900	8.13	1323	6.8	26.7	—	—	—	—	↓	150ml/30sec
0910	8.21	1318	6.6	16.65	—	—	—	—	↓	↓
0920	8.19	1316	6.7	12.29	-10	1.48	12.4	—	≈ 5.0	↓

Pumping Start Time 0850 WL \_\_\_\_\_ Pumping End Time 0930 WL \_\_\_\_\_

Comments: Water clear - no odor - Impl Quote # 356

LCF - COC# 143950

Form completed by: Don Fuller

Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-21-110Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5268-21-110Z Date Sampled 4 13 13 Time 1730 am pm  
Describe Sampling Point GW monitoring well

Well Depth 1025 ft below MP Depth to Water (below MP) 407.00 ft Casing Diameter 5 in  
Date 4 13 13 Time 1350 am pm Casing Volume 618X3 gal  
1854

At least see comment bore volumes have been evacuated before sampling

Sampling method Submersible pump 2hp ~~other methods~~

' Tap \_\_\_\_\_ ' Bailer \_\_\_\_\_

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1420	—	Started pump			—	—	—	—	—	3.0
1600	10.38	1457	13.6	869	—	—	—	—	—	3.0
1700	9.93	1387	13.5	459	—	—	—	—	—	3.0
1730	9.91	1329	13.0	334	+91	1.14	11.1	—	—	3.0

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water turbid - no odor - Did not pump 3 bore volumes from this well due to time constraints but felt comfortable collecting sample based on consistent field parameters with similar OZ wells  
HCF - COC # 148988 in the area. - IML Quote # 356

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-21-115M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5268-21-115M Date Sampled 4 / 3 / 13 Time 1800 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 850 ft below MP Depth to Water (below MP) 346.08 ft Casing Diameter 5 in  
Date 4 / 3 / 13 Time 1355 am ☒ pm Casing Volume 504X3 gal  
1512

At least see Comments more volumes have been evacuated before sampling

Sampling method Submersible pump 1 1/2 hp ~~Other methods~~

' Tap \_\_\_\_\_ ' Bailer \_\_\_\_\_

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1420	—	—	Pump started				—	—	—	5.0
1550	11.03	1413	12.9	12.52	—	—	—	—	—	4.5
1650	10.28	1324	12.8	11.60	—	—	—	—	—	4.5
1800	10.18	1332	12.4	7.81	+17	0.90	9.1	—	—	—

Pumping Start Time 1420 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - Did not pump 3 bore volumes from this well due to time constraints but felt comfortable collecting sample based on consistent field parameters with SM wells in the area.  
LCF - COC # 148988 -IML Quote # 356

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-21-115A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5268-21-115A Date Sampled 3 112 113 Time 1010 am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 75 ft below MP Depth to Water (below MP) 52.98 ft Casing Diameter 5 in  
Date 3 112 113 Time 0920 am pm Casing Volume n/a gal

At least n/a bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap Bailer \_\_\_\_\_

Pump intake or bailer set at 70 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0935	—	Started pump				—	—	↓	150 mL/30 sec.
0945	12.89	3100	6.4	30.2	—	—	—	↓	↓
0955	12.91	3070	5.6	21.2	—	—	—	↓	↓
1010	12.94	2990	5.6	12.91	-78	4.26 34.3	—	≈ 5.0	↓

Pumping Start Time 0935 WL \_\_\_\_\_ Pumping End Time 1020 WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles - IM6 Quote# 356

LCF - COC # 143948

Form completed by: Paul Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-12-010Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5268-12-010Z Date Sampled 4 / 4 / 13 Time 1230 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 845 ft below MP Depth to Water (below MP) 325.68 ft Casing Diameter 5 in  
Date 4 / 3 / 13 Time 1840 am ☒ pm Casing Volume 520X3  
1560 gal

At least 3+ 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: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0810	—	—	Started pump				—	—	—	6.0
1000	9.80	1114	12.2	35.5	—	—	—	—	660	6.0
1200	9.57	1092	12.7	20.4	—	—	—	—	1380	6.0
1230	9.56	1070	12.6	19.80	-1	1.42	13.7	—	1560	6.0

Pumping Start Time 0810 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_  
Comments: Water slightly turbid - no odor - IML Quote #356

HCF - COC # 148988

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-12-01SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5268-12-01SM Date Sampled 4/4/13 Time 1400 am pm  
Describe Sampling Point GW monitoring well

Well Depth 715 ft below MP Depth to Water (below MP) 318.60 ft Casing Diameter 5 in  
Date 4/3/13 Time 1845 am pm Casing Volume 396x3 gal  
1188 gal

At least 33 bore volumes have been evacuated before sampling

Sampling method Submersible pump 1 1/2  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at ? ft below MP.

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0810	—	Started Pump								6.0
1000	—	Ran out of water - let recharge -								
1140	—	Started pump again - Valved down to								<del>0.5</del>
1310	10.83	1717	15.3	6.57						<del>0.25</del>
1400	10.64	1715	15.4	11.19	+72	2.45	25.1			0.25

Pumping Start Time 0810 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - Impl Quote #356 - Did not pump 3 bore volumes from this well due to low flow rate and time, but felt comfortable collecting sample based on consistent field LCF-COC #148988 Parameters with similar 5m wells in the area and believe it is 5m aquifer water

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5268-12-01SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5268-12-01SA Date Sampled 3/26/13 Time 1305 am ☒ pm  
Describe Sampling Point Groundwater monitor well

Well Depth 95 ft below MP Depth to Water (below MP) 55.63 ft Casing Diameter 5 in  
Date 3/26/13 Time 1230 am ☒ pm Casing Volume \_\_\_\_\_ gal

At least NA bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder  
' Tap ' Bailer \_\_\_\_\_

Pump intake or bailer set at 90 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1245	9.15	1287	9.1	36.3	—	—	—	—	↓	150 mL/30 sec
1255	9.18	1281	8.9	35.2	—	—	—	—	↓	↓
1305	9.20	1282	8.7	25.6	+92	1.48	12.9	—	≈ 5.0	↓

Pumping Start Time 1235 WL \_\_\_\_\_ Pumping End Time 1315 WL \_\_\_\_\_

Comments: Water slightly turbid - no odor - FML Quote # 356

HCF - COC# 148998

Form completed by: Don Fuller

Witnessed by: \_\_\_\_\_



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-007  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 3:45:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.93	s.u.			Field	03/29/2013 1545
Conductivity	1824	µmhos/cm			Field	03/29/2013 1545
Dissolved Oxygen	3.34	mg/L			Field	03/29/2013 1545
Dissolved Oxygen (pct)	31.2	%			Field	03/29/2013 1545
Turbidity	3.06	NTU			Field	03/29/2013 1545
Temperature	10.6	°C			Field	03/29/2013 1545
Oxygen Reduction Potential (ORP)	+64	mV			Field	03/29/2013 1545
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	611	mg/L		5	SM 2320B	04/01/2013 2254 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	646	mg/L		5	SM 2320B	04/01/2013 2254 KV
Alkalinity, Carbonate as CO <sub>3</sub>	49	mg/L		5	SM 2320B	04/01/2013 2254 KV
Chloride	5	mg/L		1	EPA 300.0	04/02/2013 1521 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	04/01/2013 2254 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1431 RH
Sulfate	323	mg/L		1	EPA 300.0	04/02/2013 1521 AMB
Calcium	4	mg/L		1	EPA 200.7	04/01/2013 1546 DG
Magnesium	2	mg/L		1	EPA 200.7	04/01/2013 1546 DG
Potassium	8	mg/L		1	EPA 200.7	04/01/2013 1546 DG
Sodium	464	mg/L		1	EPA 200.7	04/01/2013 1546 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1137 RH
Silica as SiO <sub>2</sub>	7.3	mg/L		0.1	EPA 200.7	04/01/2013 1546 DG
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	04/01/2013 2254 KV
Electrical Conductivity	1710	µmhos/cm		5	SM 2510B	04/01/2013 2254 KV
Total Dissolved Solids (180)	1190	mg/L		10	SM 2540	04/01/2013 1806 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 825 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1431 RH
Sodium Adsorption Ratio	49.5			0.1	Calculation	04/16/2013 1400 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-007  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 3:45:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	20.70	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Anion Sum	19.11	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Cation-Anion Balance (± 5%)	3.97	%		0.01	SM 1030E	04/16/2013 1400 SL
Solids, Total Dissolved (Calc)	1180	mg/L		10	SM 1030E	04/16/2013 1400 SL
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1546 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/01/2013 1638 MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1638 MS
Boron	0.4	mg/L		0.1	EPA 200.7	04/01/2013 1546 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1638 MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1546 DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1638 MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1546 DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1638 MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1546 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1123 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1638 MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1546 DG
Selenium	ND	mg/L		0.005	EPA 200.8	04/01/2013 1638 MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1638 MS
Uranium	0.0145	mg/L		0.0003	EPA 200.8	04/01/2013 1638 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1638 MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1546 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/05/2013 1459 MS
<b>Metals - Total</b>						
Iron	0.11	mg/L		0.05	EPA 200.7	04/03/2013 1558 BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/03/2013 1558 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1221 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-007  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 3:45:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	31.5	pCi/L		3	SM 7110B	04/24/2013 2154	SH
Gross Alpha Precision (±)	4.0	pCi/L			SM 7110B	04/24/2013 2154	SH
Gross Beta	15.5	pCi/L		6	SM 7110B	04/24/2013 2154	SH
Gross Beta Precision (±)	3.7	pCi/L			SM 7110B	04/24/2013 2154	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/04/2013 421	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/04/2013 421	SH
Lead 210	1.1	pCi/L		1	OTW01	04/22/2013 1554	SH
Lead 210 Precision (±)	0.9	pCi/L			OTW01	04/22/2013 1554	SH
Polonium 210	5.1	pCi/L		1	OTW01	04/22/2013 1125	SH
Polonium 210 Precision (±)	1.0	pCi/L			OTW01	04/22/2013 1125	SH
Radium 226	1.4	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	04/17/2013 1438	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/20/2013 1650	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/20/2013 1650	WN
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1847	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1847	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/15/2013 1210	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/15/2013 1210	SH
Polonium 210	3.1	pCi/L		1	OTW01	04/24/2013 1802	SH
Polonium 210 Precision (±)	0.9	pCi/L			OTW01	04/24/2013 1802	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1458	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/18/2013 1458	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1849	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1849	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-008  
**ClientSample ID:** 5367-34-06SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 4:15:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.38	s.u.			Field	03/29/2013 1615
Conductivity	1860	µmhos/cm			Field	03/29/2013 1615
Dissolved Oxygen	1.81	mg/L			Field	03/29/2013 1615
Dissolved Oxygen (pct)	16.5	%			Field	03/29/2013 1615
Turbidity	12.50	NTU			Field	03/29/2013 1615
Temperature	10.4	°C			Field	03/29/2013 1615
Oxygen Reduction Potential (ORP)	+49	mV			Field	03/29/2013 1615
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	611	mg/L		5	SM 2320B	04/01/2013 2304 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	572	mg/L		5	SM 2320B	04/01/2013 2304 KV
Alkalinity, Carbonate as CO <sub>3</sub>	85	mg/L		5	SM 2320B	04/01/2013 2304 KV
Chloride	4	mg/L		1	EPA 300.0	04/02/2013 1534 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	04/01/2013 2304 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1432 RH
Sulfate	326	mg/L		1	EPA 300.0	04/02/2013 1534 AMB
Calcium	3	mg/L		1	EPA 200.7	04/01/2013 1600 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/01/2013 1600 DG
Potassium	28	mg/L		1	EPA 200.7	04/01/2013 1600 DG
Sodium	453	mg/L		1	EPA 200.7	04/01/2013 1600 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1138 RH
Silica as SiO <sub>2</sub>	7.3	mg/L		0.1	EPA 200.7	04/01/2013 1600 DG
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	04/01/2013 2304 KV
Electrical Conductivity	1750	µmhos/cm		5	SM 2510B	04/01/2013 2304 KV
Total Dissolved Solids (180)	1210	mg/L		10	SM 2540	04/01/2013 1807 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 826 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1432 RH
Sodium Adsorption Ratio	78.2			0.1	Calculation	04/16/2013 1400 SL

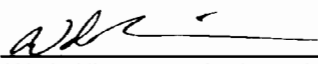
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-008  
**ClientSample ID:** 5367-34-06SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 4:15:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	20.52	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Anion Sum	19.13	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Cation-Anion Balance (± 5%)	3.50	%		0.01	SM 1030E	04/16/2013 1400	SL
Solids, Total Dissolved (Calc)	1190	mg/L		10	SM 1030E	04/16/2013 1400	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1600	DG
Arsenic	0.015	mg/L		0.005	EPA 200.8	04/01/2013 1643	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1643	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/01/2013 1600	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1643	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1600	DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1643	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1600	DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1643	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1600	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1125	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1643	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1600	DG
Selenium	0.005	mg/L		0.005	EPA 200.8	04/01/2013 1643	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1643	MS
Uranium	0.0044	mg/L		0.0003	EPA 200.8	04/01/2013 1643	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1643	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1600	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/05/2013 1504	MS
<b>Metals - Total</b>							
Iron	0.21	mg/L		0.05	EPA 200.7	04/03/2013 1600	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/03/2013 1600	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1223	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-008  
**ClientSample ID:** 5367-34-06SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 4:15:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	7.6	pCi/L		4	SM 7110B	04/24/2013 2154	SH
Gross Alpha Precision (±)	2.6	pCi/L			SM 7110B	04/24/2013 2154	SH
Gross Beta	19.1	pCi/L		6	SM 7110B	04/24/2013 2154	SH
Gross Beta Precision (±)	3.9	pCi/L			SM 7110B	04/24/2013 2154	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/04/2013 2102	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/04/2013 2102	SH
Lead 210	ND	pCi/L		1	OTW01	04/22/2013 1554	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 1554	SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 1125	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 1125	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/17/2013 1438	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/20/2013 1951	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/20/2013 1951	WN
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1847	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1847	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/15/2013 1210	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/15/2013 1210	SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1802	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1802	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1458	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/18/2013 1458	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1849	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1849	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-004  
**ClientSample ID:** 5367-34-06SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 9:20:00 AM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.33	s.u.			Field	03/26/2013 920
Conductivity	2660	µmhos/cm			Field	03/26/2013 920
Dissolved Oxygen	1.79	mg/L			Field	03/26/2013 920
Dissolved Oxygen (pct)	14.6	%			Field	03/26/2013 920
Turbidity	4.62	NTU			Field	03/26/2013 920
Temperature	5.4	°C			Field	03/26/2013 920
Oxygen Reduction Potential (ORP)	+21	mV			Field	03/26/2013 920
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	666	mg/L		5	SM 2320B	03/27/2013 1649 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	770	mg/L		5	SM 2320B	03/27/2013 1649 KV
Alkalinity, Carbonate as CO <sub>3</sub>	21	mg/L		5	SM 2320B	03/27/2013 1649 KV
Chloride	8	mg/L		1	EPA 300.0	03/29/2013 222 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/27/2013 1649 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1338 RH
Sulfate	433	mg/L		1	EPA 300.0	03/29/2013 222 AMB
Calcium	14	mg/L		1	EPA 200.7	03/28/2013 1628 BK
Magnesium	8	mg/L		1	EPA 200.7	03/28/2013 1628 BK
Potassium	11	mg/L		1	EPA 200.7	03/28/2013 1628 BK
Sodium	508	mg/L		1	EPA 200.7	03/28/2013 1628 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1108 RH
Silica as SiO <sub>2</sub>	9.1	mg/L		0.1	EPA 200.7	03/28/2013 1628 BK
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/27/2013 1649 KV
Electrical Conductivity	1900	µmhos/cm		5	SM 2510B	03/27/2013 1649 KV
Total Dissolved Solids (180)	1380	mg/L		10	SM 2540	03/28/2013 1524 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1406 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 000 CJM
Sodium Adsorption Ratio	26.7			0.1	Calculation	04/05/2013 1358 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-004  
**ClientSample ID:** 5367-34-06SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 9:20:00 AM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	23.74	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Anion Sum	22.57	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Cation-Anion Balance (± 5%)	2.51	%		0.01	SM 1030E	04/05/2013 1358	SL
Solids, Total Dissolved (Calc)	1390	mg/L		10	SM 1030E	04/05/2013 1358	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/28/2013 1628	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 1150	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 1150	MS
Boron	0.3	mg/L		0.1	EPA 200.7	03/28/2013 1628	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 1150	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1628	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 1150	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/28/2013 1628	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 1150	MS
Manganese	0.06	mg/L		0.02	EPA 200.7	03/28/2013 1628	BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1051	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 1150	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1628	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/28/2013 1150	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 1150	MS
Uranium	0.0013	mg/L		0.0003	EPA 200.8	03/28/2013 1150	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 1150	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1628	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/02/2013 1453	MS
<b>Metals - Total</b>							
Iron	0.14	mg/L		0.05	EPA 200.7	03/28/2013 1908	DG
Manganese	0.07	mg/L		0.02	EPA 200.7	03/28/2013 1908	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1218	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-004  
**ClientSample ID:** 5367-34-06SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 9:20:00 AM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/19/2013 000	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/19/2013 000	SH
Gross Beta	4.8	pCi/L		3	SM 7110B	04/19/2013 000	SH
Gross Beta Precision (±)	3.3	pCi/L			SM 7110B	04/19/2013 000	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/28/2013 008	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/28/2013 008	SH
Lead 210	1.7	pCi/L		1	OTW01	04/18/2013 1353	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/18/2013 1353	SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 1738	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 1738	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1319	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/11/2013 1319	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/13/2013 2211	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/13/2013 2211	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 813	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/19/2013 1432	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/19/2013 1432	SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1413	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1413	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 1218	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 1218	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-003  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 4:00:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.18	s.u.			Field	03/28/2013 1600
Conductivity	3410	µmhos/cm			Field	03/28/2013 1600
Dissolved Oxygen	2.02	mg/L			Field	03/28/2013 1600
Dissolved Oxygen (pct)	19.4	%			Field	03/28/2013 1600
Turbidity	0.12	NTU			Field	03/28/2013 1600
Temperature	12.0	°C			Field	03/28/2013 1600
Oxygen Reduction Potential (ORP)	-44	mV			Field	03/28/2013 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	491	mg/L		5	SM 2320B	04/01/2013 2218 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	506	mg/L		5	SM 2320B	04/01/2013 2218 KV
Alkalinity, Carbonate as CO <sub>3</sub>	46	mg/L		5	SM 2320B	04/01/2013 2218 KV
Chloride	9	mg/L		1	EPA 300.0	04/02/2013 627 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	04/01/2013 2218 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1426 RH
Sulfate	880	mg/L		1	EPA 300.0	04/02/2013 627 AMB
Calcium	3	mg/L		1	EPA 200.7	04/01/2013 1534 DG
Magnesium	2	mg/L		1	EPA 200.7	04/01/2013 1534 DG
Potassium	12	mg/L		1	EPA 200.7	04/01/2013 1534 DG
Sodium	612	mg/L		1	EPA 200.7	04/01/2013 1534 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	04/02/2013 1128 RH
Silica as SiO <sub>2</sub>	6.5	mg/L		0.1	EPA 200.7	04/01/2013 1534 DG
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	04/01/2013 2218 KV
Electrical Conductivity	2470	µmhos/cm		5	SM 2510B	04/01/2013 2218 KV
Total Dissolved Solids (180)	1860	mg/L		10	SM 2540	04/01/2013 1802 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 821 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1426 RH
Sodium Adsorption Ratio	70.6			0.1	Calculation	04/16/2013 1400 SL

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-003  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 4:00:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	27.21	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Anion Sum	28.41	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Cation-Anion Balance (± 5%)	2.17	%		0.01	SM 1030E	04/16/2013 1400 SL
Solids, Total Dissolved (Calc)	1820	mg/L		10	SM 1030E	04/16/2013 1400 SL
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1534 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/01/2013 1544 MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1544 MS
Boron	0.5	mg/L		0.1	EPA 200.7	04/01/2013 1534 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1544 MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1534 DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1544 MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1534 DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1544 MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1534 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1116 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1544 MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1534 DG
Selenium	0.005	mg/L		0.005	EPA 200.8	04/01/2013 1544 MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1544 MS
Uranium	0.0180	mg/L		0.0003	EPA 200.8	04/01/2013 1544 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1544 MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1534 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/04/2013 1446 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	04/03/2013 1549 BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/03/2013 1549 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1214 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-003  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 4:00:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	32.8	pCi/L		4	SM 7110B	04/24/2013 2154 SH
Gross Alpha Precision (±)	4.8	pCi/L			SM 7110B	04/24/2013 2154 SH
Gross Beta	13.5	pCi/L		7	SM 7110B	04/24/2013 2154 SH
Gross Beta Precision (±)	4.1	pCi/L			SM 7110B	04/24/2013 2154 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/02/2013 942 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/02/2013 942 SH
Lead 210	2.4	pCi/L		1	OTW01	04/22/2013 1237 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/22/2013 1237 SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 939 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 939 SH
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/17/2013 1438 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/15/2013 119 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/15/2013 119 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1846 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1846 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	04/26/2013 926 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/26/2013 926 SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1802 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1802 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1805 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 803 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 803 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-004  
**ClientSample ID:** 5368-43-12SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 5:00:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.39	s.u.			Field	03/28/2013 1700
Conductivity	1720	µmhos/cm			Field	03/28/2013 1700
Dissolved Oxygen	0.75	mg/L			Field	03/28/2013 1700
Dissolved Oxygen (pct)	7.1	%			Field	03/28/2013 1700
Turbidity	0.44	NTU			Field	03/28/2013 1700
Temperature	11.5	°C			Field	03/28/2013 1700
Oxygen Reduction Potential (ORP)	-69	mV			Field	03/28/2013 1700
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	545	mg/L		5	SM 2320B	04/01/2013 2226 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	507	mg/L		5	SM 2320B	04/01/2013 2226 KV
Alkalinity, Carbonate as CO <sub>3</sub>	78	mg/L		5	SM 2320B	04/01/2013 2226 KV
Chloride	3	mg/L		1	EPA 300.0	04/02/2013 640 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	04/01/2013 2226 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1427 RH
Sulfate	307	mg/L		1	EPA 300.0	04/02/2013 640 AMB
Calcium	2	mg/L		1	EPA 200.7	04/01/2013 1536 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/01/2013 1536 DG
Potassium	25	mg/L		1	EPA 200.7	04/01/2013 1536 DG
Sodium	411	mg/L		1	EPA 200.7	04/01/2013 1536 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1129 RH
Silica as SiO <sub>2</sub>	7.5	mg/L		0.1	EPA 200.7	04/01/2013 1536 DG
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	04/01/2013 2226 KV
Electrical Conductivity	1630	µmhos/cm		5	SM 2510B	04/01/2013 2226 KV
Total Dissolved Solids (180)	1130	mg/L		10	SM 2540	04/01/2013 1803 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 822 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1427 RH
Sodium Adsorption Ratio	79.7			0.1	Calculation	04/16/2013 1400 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-004  
**ClientSample ID:** 5368-43-12SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 5:00:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	18.61	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Anion Sum	17.44	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Cation-Anion Balance (± 5%)	3.24	%		0.01	SM 1030E	04/16/2013 1400 SL
Solids, Total Dissolved (Calc)	1080	mg/L		10	SM 1030E	04/16/2013 1400 SL
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1536 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/01/2013 1549 MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1549 MS
Boron	0.4	mg/L		0.1	EPA 200.7	04/01/2013 1536 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1549 MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1536 DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1549 MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1536 DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1549 MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1536 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1118 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1549 MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1536 DG
Selenium	ND	mg/L		0.005	EPA 200.8	04/01/2013 1549 MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1549 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	04/01/2013 1549 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1549 MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1536 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/04/2013 1451 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	04/03/2013 1551 BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/03/2013 1551 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1215 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-004  
**ClientSample ID:** 5368-43-12SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 5:00:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	04/24/2013 2154	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/24/2013 2154	SH
Gross Beta	17.1	pCi/L		4	SM 7110B	04/24/2013 2154	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	04/24/2013 2154	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/02/2013 1547	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/02/2013 1547	SH
Lead 210	3.0	pCi/L		1	OTW01	04/22/2013 1237	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/22/2013 1237	SH
Polonium 210	1.0	pCi/L		1	OTW01	04/22/2013 939	SH
Polonium 210 Precision (±)	0.8	pCi/L			OTW01	04/22/2013 939	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/17/2013 1438	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/15/2013 420	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/15/2013 420	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1846	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1846	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/26/2013 926	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/26/2013 926	SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1802	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1802	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1805	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 803	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 803	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-005  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 12:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.32	s.u.			Field	03/29/2013 1230
Conductivity	1458	µmhos/cm			Field	03/29/2013 1230
Dissolved Oxygen	2.09	mg/L			Field	03/29/2013 1230
Dissolved Oxygen (pct)	20.2	%			Field	03/29/2013 1230
Turbidity	18.14	NTU			Field	03/29/2013 1230
Temperature	12.4	°C			Field	03/29/2013 1230
Oxygen Reduction Potential (ORP)	-35	mV			Field	03/29/2013 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	507	mg/L		5	SM 2320B	04/01/2013 2236 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	481	mg/L		5	SM 2320B	04/01/2013 2236 KV
Alkalinity, Carbonate as CO <sub>3</sub>	68	mg/L		5	SM 2320B	04/01/2013 2236 KV
Chloride	5	mg/L		1	EPA 300.0	04/02/2013 653 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	04/01/2013 2236 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1429 RH
Sulfate	270	mg/L		1	EPA 300.0	04/02/2013 653 AMB
Calcium	2	mg/L		1	EPA 200.7	04/01/2013 1539 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/01/2013 1539 DG
Potassium	8	mg/L		1	EPA 200.7	04/01/2013 1539 DG
Sodium	373	mg/L		1	EPA 200.7	04/01/2013 1539 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1135 RH
Silica as SiO <sub>2</sub>	7.6	mg/L		0.1	EPA 200.7	04/01/2013 1539 DG
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	04/01/2013 2236 KV
Electrical Conductivity	1430	µmhos/cm		5	SM 2510B	04/01/2013 2236 KV
Total Dissolved Solids (180)	970	mg/L		10	SM 2540	04/01/2013 1804 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 823 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1429 RH
Sodium Adsorption Ratio	66.0			0.1	Calculation	04/16/2013 1400 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-005  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 12:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	16.56	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Anion Sum	15.98	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Cation-Anion Balance (± 5%)	1.76	%		0.01	SM 1030E	04/16/2013 1400	SL
Solids, Total Dissolved (Calc)	970	mg/L		10	SM 1030E	04/16/2013 1400	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1539	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/01/2013 1603	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1603	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/01/2013 1539	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1603	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1539	DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1603	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1539	DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1603	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1539	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1120	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1603	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1539	DG
Selenium	ND	mg/L		0.005	EPA 200.8	04/01/2013 1603	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1603	MS
Uranium	0.0201	mg/L		0.0003	EPA 200.8	04/01/2013 1603	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1603	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1539	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/05/2013 1435	MS
<b>Metals - Total</b>							
Iron	0.29	mg/L		0.05	EPA 200.7	04/03/2013 1553	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/03/2013 1553	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1217	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-005  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 12:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	35.6	pCi/L		2	SM 7110B	04/24/2013 2154 SH
Gross Alpha Precision (±)	3.6	pCi/L			SM 7110B	04/24/2013 2154 SH
Gross Beta	8.5	pCi/L		5	SM 7110B	04/24/2013 2154 SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	04/24/2013 2154 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/02/2013 2202 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/02/2013 2202 SH
Lead 210	ND	pCi/L		1	OTW01	04/22/2013 1237 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 1237 SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 939 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 939 SH
Radium 226	0.8	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/17/2013 1438 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/20/2013 1048 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/20/2013 1048 WN
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1846 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1846 MB
<b>Radionuclides - Suspended</b>						
Lead 210	1.1	pCi/L		1	OTW01	04/15/2013 1210 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/15/2013 1210 SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1802 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1802 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1458 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/18/2013 1458 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1849 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1849 MB

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-006  
**ClientSample ID:** 5368-33-14SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 1:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.85	s.u.			Field	03/29/2013 1330
Conductivity	1437	µmhos/cm			Field	03/29/2013 1330
Dissolved Oxygen	1.09	mg/L			Field	03/29/2013 1330
Dissolved Oxygen (pct)	10.4	%			Field	03/29/2013 1330
Turbidity	2.25	NTU			Field	03/29/2013 1330
Temperature	12.5	°C			Field	03/29/2013 1330
Oxygen Reduction Potential (ORP)	-5	mV			Field	03/29/2013 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	585	mg/L		5	SM 2320B	04/01/2013 2245 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	418	mg/L		5	SM 2320B	04/01/2013 2245 KV
Alkalinity, Carbonate as CO <sub>3</sub>	145	mg/L		5	SM 2320B	04/01/2013 2245 KV
Chloride	2	mg/L		1	EPA 300.0	04/02/2013 705 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	04/01/2013 2245 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1430 RH
Sulfate	172	mg/L		1	EPA 300.0	04/02/2013 705 AMB
Calcium	2	mg/L		1	EPA 200.7	04/01/2013 1541 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/01/2013 1541 DG
Potassium	32	mg/L		1	EPA 200.7	04/01/2013 1541 DG
Sodium	325	mg/L		1	EPA 200.7	04/01/2013 1541 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1136 RH
Silica as SiO <sub>2</sub>	8.1	mg/L		0.1	EPA 200.7	04/01/2013 1541 DG
<b>General Parameters</b>						
pH	9.6	s.u.		0.1	SM 4500 H B	04/01/2013 2245 KV
Electrical Conductivity	1360	µmhos/cm		5	SM 2510B	04/01/2013 2245 KV
Total Dissolved Solids (180)	890	mg/L		10	SM 2540	04/01/2013 1805 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 824 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1430 RH
Sodium Adsorption Ratio	68.3			0.1	Calculation	04/16/2013 1400 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-006  
**ClientSample ID:** 5368-33-14SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 1:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	15.06	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Anion Sum	15.39	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Cation-Anion Balance (± 5%)	1.08	%		0.01	SM 1030E	04/16/2013 1400	SL
Solids, Total Dissolved (Calc)	890	mg/L		10	SM 1030E	04/16/2013 1400	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1541	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/01/2013 1633	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1633	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/01/2013 1541	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1633	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1541	DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1633	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1541	DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1633	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1541	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1121	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1633	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1541	DG
Selenium	0.006	mg/L		0.005	EPA 200.8	04/01/2013 1633	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1633	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	04/01/2013 1633	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1633	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1541	DG
<b>Metals - Suspended</b>							
Uranium	0.0006	mg/L		0.0003	EPA 200.8	04/05/2013 1454	MS
<b>Metals - Total</b>							
Iron	0.06	mg/L		0.05	EPA 200.7	04/03/2013 1556	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/03/2013 1556	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1219	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-006  
**ClientSample ID:** 5368-33-14SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/29/2013 1:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	04/24/2013 2154 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/24/2013 2154 SH
Gross Beta	24.5	pCi/L		4	SM 7110B	04/24/2013 2154 SH
Gross Beta Precision (±)	2.5	pCi/L			SM 7110B	04/24/2013 2154 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/03/2013 852 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/03/2013 852 SH
Lead 210	ND	pCi/L		1	OTW01	04/22/2013 1237 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 1237 SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 939 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 939 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/17/2013 1438 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/20/2013 1349 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/20/2013 1349 WN
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1846 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1846 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	04/15/2013 1210 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/15/2013 1210 SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1802 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1802 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1458 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/18/2013 1458 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1849 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1849 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-005  
**ClientSample ID:** 5368-33-14SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 1:40:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.61	s.u.			Field	03/12/2013 1340
Conductivity	853	µmhos/cm			Field	03/12/2013 1340
Dissolved Oxygen	1.53	mg/L			Field	03/12/2013 1340
Dissolved Oxygen (pct)	13.8	%			Field	03/12/2013 1340
Turbidity	4.86	NTU			Field	03/12/2013 1340
Temperature	9.3	°C			Field	03/12/2013 1340
Oxygen Reduction Potential (ORP)	-2	mV			Field	03/12/2013 1340
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	454	mg/L		5	SM 2320B	03/14/2013 1835 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	527	mg/L		5	SM 2320B	03/14/2013 1835 KV
Alkalinity, Carbonate as CO <sub>3</sub>	13	mg/L		5	SM 2320B	03/14/2013 1835 KV
Chloride	1	mg/L		1	EPA 300.0	03/15/2013 224 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/14/2013 1835 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1326 RH
Sulfate	57	mg/L		1	EPA 300.0	03/15/2013 224 AMB
Calcium	24	mg/L		1	EPA 200.7	03/15/2013 1149 BK
Magnesium	18	mg/L		1	EPA 200.7	03/15/2013 1149 BK
Potassium	11	mg/L		1	EPA 200.7	03/15/2013 1149 BK
Sodium	150	mg/L		1	EPA 200.7	03/15/2013 1149 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1558 RH
Silica as SiO <sub>2</sub>	9.8	mg/L		0.1	EPA 200.7	03/14/2013 1556 DG
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/14/2013 1835 KV
Electrical Conductivity	759	µmhos/cm		5	SM 2510B	03/14/2013 1835 KV
Total Dissolved Solids (180)	540	mg/L		10	SM 2540	03/13/2013 1759 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/20/2013 1508 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1326 RH
Sodium Adsorption Ratio	5.6			0.1	Calculation	04/09/2013 1312 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-005  
**ClientSample ID:** 5368-33-14SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 1:40:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	9.44	meq/L		0.01	SM 1030E	04/09/2013 1312 WN
Anion Sum	10.29	meq/L		0.01	SM 1030E	04/09/2013 1312 WN
Cation-Anion Balance (± 5%)	4.30	%		0.01	SM 1030E	04/09/2013 1312 WN
Solids, Total Dissolved (Calc)	540	mg/L		10	SM 1030E	04/09/2013 1312 WN
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1149 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1557 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1557 MS
Boron	ND	mg/L		0.1	EPA 200.7	03/15/2013 1149 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1557 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1149 BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1557 MS
Iron	0.23	mg/L		0.05	EPA 200.7	03/15/2013 1149 BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1557 MS
Manganese	0.08	mg/L		0.02	EPA 200.7	03/15/2013 1149 BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1106 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1557 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1149 BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1557 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1557 MS
Uranium	0.0141	mg/L		0.0003	EPA 200.8	03/14/2013 1557 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1557 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1149 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1325 MS
<b>Metals - Total</b>						
Iron	0.43	mg/L		0.05	EPA 200.7	03/18/2013 2041 DG
Manganese	0.11	mg/L		0.02	EPA 200.7	03/18/2013 2041 DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1120 CS

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-005  
**ClientSample ID:** 5368-33-14SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 1:40:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	8.6	pCi/L		2	SM 7110B	04/03/2013 2142	SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Beta	12.0	pCi/L		3	SM 7110B	04/03/2013 2142	SH
Gross Beta Precision (±)	1.6	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/17/2013 1617	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/17/2013 1617	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1144	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1144	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/28/2013 938	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/28/2013 938	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 955	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 955	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1911	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1911	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1658	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1658	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/27/2013 812	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/27/2013 812	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-001  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 2:10:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.18	s.u.			Field	04/02/2013 1410
Conductivity	1439	µmhos/cm			Field	04/02/2013 1410
Dissolved Oxygen	1.95	mg/L			Field	04/02/2013 1410
Dissolved Oxygen (pct)	18.8	%			Field	04/02/2013 1410
Turbidity	196	NTU			Field	04/02/2013 1410
Temperature	12.4	°C			Field	04/02/2013 1410
Oxygen Reduction Potential (ORP)	-69	mV			Field	04/02/2013 1410
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	531	mg/L		5	SM 2320B	04/04/2013 2155 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	569	mg/L		5	SM 2320B	04/04/2013 2155 KV
Alkalinity, Carbonate as CO <sub>3</sub>	39	mg/L		5	SM 2320B	04/04/2013 2155 KV
Chloride	3	mg/L		1	EPA 300.0	04/06/2013 1038 AMB
Fluoride	1.7	mg/L		0.1	SM 4500FC	04/04/2013 2155 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1506 RH
Sulfate	251	mg/L		1	EPA 300.0	04/06/2013 1038 AMB
Calcium	3	mg/L		1	EPA 200.7	04/05/2013 1152 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/05/2013 1152 DG
Potassium	5	mg/L		1	EPA 200.7	04/05/2013 1152 DG
Sodium	382	mg/L		1	EPA 200.7	04/05/2013 1152 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	04/10/2013 1118 RH
Silica as SiO <sub>2</sub>	9.1	mg/L		0.1	EPA 200.7	04/05/2013 1152 DG
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	04/04/2013 2155 KV
Electrical Conductivity	1570	µmhos/cm		5	SM 2510B	04/04/2013 2155 KV
Total Dissolved Solids (180)	1080	mg/L		10	SM 2540	04/05/2013 1634 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/04/2013 1451 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1506 RH
Sodium Adsorption Ratio	65.2			0.1	Calculation	04/17/2013 1039 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-001  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 2:10:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	16.89	meq/L		0.01	SM 1030E	04/17/2013 1039	LJK
Anion Sum	16.02	meq/L		0.01	SM 1030E	04/17/2013 1039	LJK
Cation-Anion Balance (± 5%)	2.63	%		0.01	SM 1030E	04/17/2013 1039	LJK
Solids, Total Dissolved (Calc)	970	mg/L		10	SM 1030E	04/17/2013 1039	LJK
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	04/05/2013 1152	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/04/2013 1506	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/04/2013 1506	MS
Boron	0.4	mg/L		0.1	EPA 200.7	04/05/2013 1152	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/04/2013 1506	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/05/2013 1152	DG
Copper	ND	mg/L		0.01	EPA 200.8	04/04/2013 1506	MS
Iron	0.08	mg/L		0.05	EPA 200.7	04/05/2013 1152	DG
Lead	ND	mg/L		0.02	EPA 200.8	04/04/2013 1506	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/05/2013 1152	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1101	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/04/2013 1506	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/05/2013 1152	DG
Selenium	ND	mg/L		0.005	EPA 200.8	04/04/2013 1506	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/04/2013 1506	MS
Uranium	0.0080	mg/L		0.0003	EPA 200.8	04/04/2013 1506	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/04/2013 1506	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/05/2013 1152	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/15/2013 1554	MS
<b>Metals - Total</b>							
Iron	6.13	mg/L		0.05	EPA 200.7	04/05/2013 1615	DG
Manganese	0.09	mg/L		0.02	EPA 200.7	04/05/2013 1615	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1125	CS

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-001  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 2:10:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	10.5	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	3.3	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/10/2013 1918	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/10/2013 1918	SH
Lead 210	ND	pCi/L		1	OTW01	05/02/2013 1550	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/02/2013 1550	SH
Polonium 210	ND	pCi/L		1	OTW01	05/06/2013 1048	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/06/2013 1048	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1231	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/18/2013 1231	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/22/2013 1104	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/22/2013 1104	WN
Thorium 230	ND	pCi/L		0.2	ACW10	04/25/2013 708	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/25/2013 708	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1430	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1430	SH
Polonium 210	ND	pCi/L		1	OTW01	05/08/2013 1128	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1128	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/30/2013 916	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/30/2013 916	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/08/2013 1354	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/08/2013 1354	MB

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-002  
**ClientSample ID:** 5368-41-23SM  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 1:30:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.95	s.u.			Field	04/02/2013 1330
Conductivity	1453	µmhos/cm			Field	04/02/2013 1330
Dissolved Oxygen	2.01	mg/L			Field	04/02/2013 1330
Dissolved Oxygen (pct)	19.5	%			Field	04/02/2013 1330
Turbidity	17.49	NTU			Field	04/02/2013 1330
Temperature	11.8	°C			Field	04/02/2013 1330
Oxygen Reduction Potential (ORP)	-86	mV			Field	04/02/2013 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	547	mg/L		5	SM 2320B	04/04/2013 2207 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	586	mg/L		5	SM 2320B	04/04/2013 2207 KV
Alkalinity, Carbonate as CO <sub>3</sub>	40	mg/L		5	SM 2320B	04/04/2013 2207 KV
Chloride	3	mg/L		1	EPA 300.0	04/06/2013 1051 AMB
Fluoride	1.7	mg/L		0.1	SM 4500FC	04/04/2013 2207 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1507 RH
Sulfate	229	mg/L		1	EPA 300.0	04/06/2013 1051 AMB
Calcium	3	mg/L		1	EPA 200.7	04/05/2013 1154 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/05/2013 1154 DG
Potassium	5	mg/L		1	EPA 200.7	04/05/2013 1154 DG
Sodium	380	mg/L		1	EPA 200.7	04/05/2013 1154 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	04/10/2013 1119 RH
Silica as SiO <sub>2</sub>	8.6	mg/L		0.1	EPA 200.7	04/05/2013 1154 DG
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	04/04/2013 2207 KV
Electrical Conductivity	1580	µmhos/cm		5	SM 2510B	04/04/2013 2207 KV
Total Dissolved Solids (180)	1080	mg/L		10	SM 2540	04/05/2013 1635 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/04/2013 1452 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1507 RH
Sodium Adsorption Ratio	65.6			0.1	Calculation	04/17/2013 1039 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-002  
**ClientSample ID:** 5368-41-23SM  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 1:30:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	16.81	meq/L		0.01	SM 1030E	04/17/2013 1039	LJK
Anion Sum	15.88	meq/L		0.01	SM 1030E	04/17/2013 1039	LJK
Cation-Anion Balance (± 5%)	2.86	%		0.01	SM 1030E	04/17/2013 1039	LJK
Solids, Total Dissolved (Calc)	960	mg/L		10	SM 1030E	04/17/2013 1039	LJK
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/05/2013 1154	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	04/04/2013 1525	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/04/2013 1525	MS
Boron	0.5	mg/L		0.1	EPA 200.7	04/05/2013 1154	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/04/2013 1525	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/05/2013 1154	DG
Copper	ND	mg/L		0.01	EPA 200.8	04/04/2013 1525	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/05/2013 1154	DG
Lead	ND	mg/L		0.02	EPA 200.8	04/04/2013 1525	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/05/2013 1154	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1103	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/04/2013 1525	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/05/2013 1154	DG
Selenium	0.008	mg/L		0.005	EPA 200.8	04/04/2013 1525	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/04/2013 1525	MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	04/04/2013 1525	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/04/2013 1525	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/05/2013 1154	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1252	MS
<b>Metals - Total</b>							
Iron	0.71	mg/L		0.05	EPA 200.7	04/05/2013 1618	DG
Manganese	ND	mg/L		0.02	EPA 200.7	04/05/2013 1618	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1127	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-002  
**ClientSample ID:** 5368-41-23SM  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 1:30:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	04/29/2013 2115 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Beta	4.0	pCi/L		3	SM 7110B	04/29/2013 2115 SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/11/2013 1116 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/11/2013 1116 SH
Lead 210	ND	pCi/L		1	OTW01	05/02/2013 1550 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/02/2013 1550 SH
Polonium 210	ND	pCi/L		1	OTW01	05/06/2013 1048 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/06/2013 1048 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1231 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/18/2013 1231 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/22/2013 1405 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/22/2013 1405 WN
Thorium 230	ND	pCi/L		0.2	ACW10	04/25/2013 708 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/25/2013 708 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1430 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1430 SH
Polonium 210	ND	pCi/L		1	OTW01	05/08/2013 1128 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1128 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036 SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1257 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1257 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-004  
**ClientSample ID:** 5368-41-23SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 12:00:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.03	s.u.			Field	03/12/2013 1200
Conductivity	1237	µmhos/cm			Field	03/12/2013 1200
Dissolved Oxygen	1.68	mg/L			Field	03/12/2013 1200
Dissolved Oxygen (pct)	14.4	%			Field	03/12/2013 1200
Turbidity	71.4	NTU			Field	03/12/2013 1200
Temperature	7.6	°C			Field	03/12/2013 1200
Oxygen Reduction Potential (ORP)	+146	mV			Field	03/12/2013 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	517	mg/L		5	SM 2320B	03/14/2013 1821 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	616	mg/L		5	SM 2320B	03/14/2013 1821 KV
Alkalinity, Carbonate as CO <sub>3</sub>	7	mg/L		5	SM 2320B	03/14/2013 1821 KV
Chloride	5	mg/L		1	EPA 300.0	03/15/2013 212 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/14/2013 1821 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1324 RH
Sulfate	203	mg/L		1	EPA 300.0	03/15/2013 212 AMB
Calcium	110	mg/L		1	EPA 200.7	03/15/2013 1144 BK
Magnesium	57	mg/L		1	EPA 200.7	03/15/2013 1144 BK
Potassium	24	mg/L		1	EPA 200.7	03/15/2013 1144 BK
Sodium	82	mg/L		1	EPA 200.7	03/15/2013 1144 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1557 RH
Silica as SiO <sub>2</sub>	17.8	mg/L		0.1	EPA 200.7	03/14/2013 1551 DG
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	03/14/2013 1821 KV
Electrical Conductivity	968	µmhos/cm		5	SM 2510B	03/14/2013 1821 KV
Total Dissolved Solids (180)	750	mg/L		10	SM 2540	03/13/2013 1758 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/20/2013 1507 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1324 RH
Sodium Adsorption Ratio	1.6			0.1	Calculation	04/09/2013 1312 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-004  
**ClientSample ID:** 5368-41-23SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 12:00:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	14.31	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Anion Sum	14.70	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Cation-Anion Balance (± 5%)	1.34	%		0.01	SM 1030E	04/09/2013 1312	WN
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	04/09/2013 1312	WN
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1144	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1552	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1552	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/15/2013 1144	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1552	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1144	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1552	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1144	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1552	MS
Manganese	0.02	mg/L		0.02	EPA 200.7	03/15/2013 1144	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1552	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1144	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1552	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1552	MS
Uranium	0.0561	mg/L		0.0003	EPA 200.8	03/14/2013 1552	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1552	MS
Zinc	0.01	mg/L		0.01	EPA 200.7	03/15/2013 1144	BK
<b>Metals - Suspended</b>							
Uranium	0.0003	mg/L		0.0003	EPA 200.8	03/15/2013 1320	MS
<b>Metals - Total</b>							
Iron	3.71	mg/L		0.05	EPA 200.7	03/18/2013 2039	DG
Manganese	0.10	mg/L		0.02	EPA 200.7	03/18/2013 2039	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1118	CS

These results apply only to the samples tested.

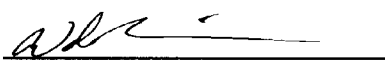
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-004  
**ClientSample ID:** 5368-41-23SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 12:00:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	36.6	pCi/L		2	SM 7110B	04/03/2013 2142 SH
Gross Alpha Precision (±)	3.4	pCi/L			SM 7110B	04/03/2013 2142 SH
Gross Beta	29.4	pCi/L		4	SM 7110B	04/03/2013 2142 SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	04/03/2013 2142 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/17/2013 914 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/17/2013 914 SH
Lead 210	1.4	pCi/L		1	OTW01	04/02/2013 1144 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 1144 SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850 SH
Radium 226	0.8	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1541 SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/28/2013 637 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/28/2013 637 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 955 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 955 MB
<b>Radionuclides - Suspended</b>						
Lead 210	1.0	pCi/L		1	OTW01	04/02/2013 1911 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 1911 SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1658 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1658 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123 SH
Thorium 230	0.5	pCi/L		0.2	ACW10	03/27/2013 812 MB
Thorium 230 Precision (±)	0.1	pCi/L			ACW10	03/27/2013 812 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-001  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 1:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.31	s.u.			Field	03/28/2013 1330
Conductivity	1794	µmhos/cm			Field	03/28/2013 1330
Dissolved Oxygen	1.38	mg/L			Field	03/28/2013 1330
Dissolved Oxygen (pct)	13.2	%			Field	03/28/2013 1330
Turbidity	1.17	NTU			Field	03/28/2013 1330
Temperature	12.5	°C			Field	03/28/2013 1330
Oxygen Reduction Potential (ORP)	-8	mV			Field	03/28/2013 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	493	mg/L		5	SM 2320B	04/01/2013 2158 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	482	mg/L		5	SM 2320B	04/01/2013 2158 KV
Alkalinity, Carbonate as CO <sub>3</sub>	59	mg/L		5	SM 2320B	04/01/2013 2158 KV
Chloride	8	mg/L		1	EPA 300.0	04/02/2013 602 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	04/01/2013 2158 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1418 RH
Sulfate	406	mg/L		1	EPA 300.0	04/02/2013 602 AMB
Calcium	2	mg/L		1	EPA 200.7	04/01/2013 1530 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/01/2013 1530 DG
Potassium	8	mg/L		1	EPA 200.7	04/01/2013 1530 DG
Sodium	456	mg/L		1	EPA 200.7	04/01/2013 1530 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1126 RH
Silica as SiO <sub>2</sub>	7.6	mg/L		0.1	EPA 200.7	04/01/2013 1530 DG
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	04/01/2013 2158 KV
Electrical Conductivity	1700	µmhos/cm		5	SM 2510B	04/01/2013 2158 KV
Total Dissolved Solids (180)	1200	mg/L		10	SM 2540	04/01/2013 1800 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 819 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1418 RH
Sodium Adsorption Ratio	83.8			0.1	Calculation	04/16/2013 1400 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-001  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 1:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	20.14	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Anion Sum	18.61	meq/L		0.01	SM 1030E	04/16/2013 1400	SL
Cation-Anion Balance (± 5%)	3.94	%		0.01	SM 1030E	04/16/2013 1400	SL
Solids, Total Dissolved (Calc)	1180	mg/L		10	SM 1030E	04/16/2013 1400	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1530	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/01/2013 1534	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1534	MS
Boron	0.5	mg/L		0.1	EPA 200.7	04/01/2013 1530	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1534	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1530	DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1534	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1530	DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1534	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1530	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1059	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1534	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1530	DG
Selenium	ND	mg/L		0.005	EPA 200.8	04/01/2013 1534	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1534	MS
Uranium	0.0092	mg/L		0.0003	EPA 200.8	04/01/2013 1534	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1534	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1530	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/04/2013 1436	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	04/03/2013 1530	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/03/2013 1530	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1204	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-001  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 1:30:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	15.1	pCi/L		3	SM 7110B	04/21/2013 2022	SH
Gross Alpha Precision (±)	3.1	pCi/L			SM 7110B	04/21/2013 2022	SH
Gross Beta	ND	pCi/L		7	SM 7110B	04/21/2013 2022	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	04/21/2013 2022	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/01/2013 1236	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/01/2013 1236	SH
Lead 210	ND	pCi/L		1	OTW01	04/22/2013 1237	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 1237	SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 939	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 939	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/17/2013 1438	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 1917	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 1917	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1846	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1846	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/30/2013 1532	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/30/2013 1532	SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1802	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1802	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1805	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 803	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 803	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-002  
**ClientSample ID:** 5368-24-12SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 1:15:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.31	s.u.			Field	03/28/2013 1315
Conductivity	1353	µmhos/cm			Field	03/28/2013 1315
Dissolved Oxygen	0.99	mg/L			Field	03/28/2013 1315
Dissolved Oxygen (pct)	9.6	%			Field	03/28/2013 1315
Turbidity	42.6	NTU			Field	03/28/2013 1315
Temperature	12.2	°C			Field	03/28/2013 1315
Oxygen Reduction Potential (ORP)	-53	mV			Field	03/28/2013 1315
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	536	mg/L		5	SM 2320B	04/01/2013 2208 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	528	mg/L		5	SM 2320B	04/01/2013 2208 KV
Alkalinity, Carbonate as CO <sub>3</sub>	62	mg/L		5	SM 2320B	04/01/2013 2208 KV
Chloride	3	mg/L		1	EPA 300.0	04/02/2013 615 AMB
Fluoride	2.3	mg/L		0.1	SM 4500FC	04/01/2013 2208 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1419 RH
Sulfate	192	mg/L		1	EPA 300.0	04/02/2013 615 AMB
Calcium	3	mg/L		1	EPA 200.7	04/01/2013 1532 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/01/2013 1532 DG
Potassium	4	mg/L		1	EPA 200.7	04/01/2013 1532 DG
Sodium	341	mg/L		1	EPA 200.7	04/01/2013 1532 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1127 RH
Silica as SiO <sub>2</sub>	9.2	mg/L		0.1	EPA 200.7	04/01/2013 1532 DG
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	04/01/2013 2208 KV
Electrical Conductivity	1280	µmhos/cm		5	SM 2510B	04/01/2013 2208 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	04/01/2013 1801 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/01/2013 820 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1419 RH
Sodium Adsorption Ratio	57.9			0.1	Calculation	04/16/2013 1400 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-002  
**ClientSample ID:** 5368-24-12SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 1:15:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	15.06	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Anion Sum	14.90	meq/L		0.01	SM 1030E	04/16/2013 1400 SL
Cation-Anion Balance (± 5%)	0.53	%		0.01	SM 1030E	04/16/2013 1400 SL
Solids, Total Dissolved (Calc)	870	mg/L		10	SM 1030E	04/16/2013 1400 SL
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	04/01/2013 1532 DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	04/01/2013 1539 MS
Barium	ND	mg/L		0.5	EPA 200.8	04/01/2013 1539 MS
Boron	0.5	mg/L		0.1	EPA 200.7	04/01/2013 1532 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/01/2013 1539 MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/01/2013 1532 DG
Copper	ND	mg/L		0.01	EPA 200.8	04/01/2013 1539 MS
Iron	ND	mg/L		0.05	EPA 200.7	04/01/2013 1532 DG
Lead	ND	mg/L		0.02	EPA 200.8	04/01/2013 1539 MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/01/2013 1532 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1108 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/01/2013 1539 MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/01/2013 1532 DG
Selenium	ND	mg/L		0.005	EPA 200.8	04/01/2013 1539 MS
Silver	ND	mg/L		0.003	EPA 200.8	04/01/2013 1539 MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	04/01/2013 1539 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/01/2013 1539 MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/01/2013 1532 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/04/2013 1441 MS
<b>Metals - Total</b>						
Iron	1.35	mg/L		0.05	EPA 200.7	04/03/2013 1542 BK
Manganese	0.03	mg/L		0.02	EPA 200.7	04/03/2013 1542 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1212 CS

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303465001

**ProjectName:** Kendrick  
**Lab ID:** S1303465-002  
**ClientSample ID:** 5368-24-12SM  
**COC:** 143951 148987

**WorkOrder:** S1303465  
**CollectionDate:** 3/28/2013 1:15:00 PM  
**DateReceived:** 3/30/2013 11:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	6.8	pCi/L		2	SM 7110B	04/21/2013 2022	SH
Gross Alpha Precision (±)	1.9	pCi/L			SM 7110B	04/21/2013 2022	SH
Gross Beta	6.0	pCi/L		4	SM 7110B	04/21/2013 2022	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	04/21/2013 2022	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/01/2013 1908	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/01/2013 1908	SH
Lead 210	ND	pCi/L		1	OTW01	04/22/2013 1237	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 1237	SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 939	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 939	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/17/2013 1438	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/17/2013 1438	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 2218	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 2218	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1846	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1846	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/26/2013 926	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/26/2013 926	SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1802	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1802	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1805	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 803	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 803	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-001  
**ClientSample ID:** 5368-24-12SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/11/2013 1:45:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.36	s.u.			Field	03/11/2013 1345
Conductivity	1085	µmhos/cm			Field	03/11/2013 1345
Dissolved Oxygen	1.56	mg/L			Field	03/11/2013 1345
Dissolved Oxygen (pct)	13.8	%			Field	03/11/2013 1345
Turbidity	34.6	NTU			Field	03/11/2013 1345
Temperature	8.9	°C			Field	03/11/2013 1345
Oxygen Reduction Potential (ORP)	+49	mV			Field	03/11/2013 1345
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	535	mg/L		5	SM 2320B	03/14/2013 1730 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	534	mg/L		5	SM 2320B	03/14/2013 1730 KV
Alkalinity, Carbonate as CO <sub>3</sub>	58	mg/L		5	SM 2320B	03/14/2013 1730 KV
Chloride	2	mg/L		1	EPA 300.0	03/15/2013 137 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	03/14/2013 1730 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1321 RH
Sulfate	53	mg/L		1	EPA 300.0	03/15/2013 137 AMB
Calcium	3	mg/L		1	EPA 200.7	03/15/2013 1137 BK
Magnesium	1	mg/L		1	EPA 200.7	03/15/2013 1137 BK
Potassium	7	mg/L		1	EPA 200.7	03/15/2013 1137 BK
Sodium	282	mg/L		1	EPA 200.7	03/15/2013 1137 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1554 RH
Silica as SiO <sub>2</sub>	7.7	mg/L		0.1	EPA 200.7	03/14/2013 1544 DG
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	03/14/2013 1730 KV
Electrical Conductivity	1040	µmhos/cm		5	SM 2510B	03/14/2013 1730 KV
Total Dissolved Solids (180)	700	mg/L		10	SM 2540	03/13/2013 1754 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/20/2013 1504 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1321 RH
Sodium Adsorption Ratio	34.8			0.1	Calculation	04/09/2013 1312 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-001  
**ClientSample ID:** 5368-24-12SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/11/2013 1:45:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	12.70	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Anion Sum	11.88	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Cation-Anion Balance (± 5%)	3.31	%		0.01	SM 1030E	04/09/2013 1312	WN
Solids, Total Dissolved (Calc)	680	mg/L		10	SM 1030E	04/09/2013 1312	WN
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1137	BK
Arsenic	0.027	mg/L		0.005	EPA 200.8	03/14/2013 1528	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1528	MS
Boron	0.3	mg/L		0.1	EPA 200.7	03/15/2013 1137	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1528	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1137	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1528	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1137	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1528	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/15/2013 1137	BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1035	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1528	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1137	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1528	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1528	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	03/14/2013 1528	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1528	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1137	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1241	MS
<b>Metals - Total</b>							
Iron	1.52	mg/L		0.05	EPA 200.7	03/18/2013 2018	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	03/18/2013 2018	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1112	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-001  
**ClientSample ID:** 5368-24-12SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/11/2013 1:45:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.8	pCi/L		2	SM 7110B	04/02/2013 2132	SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	04/02/2013 2132	SH
Gross Beta	7.0	pCi/L		4	SM 7110B	04/02/2013 2132	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	04/02/2013 2132	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/15/2013 1820	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/15/2013 1820	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 911	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 911	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1741	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1741	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/27/2013 2134	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/27/2013 2134	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 955	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 955	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1911	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1911	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1658	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1658	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 1418	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 1418	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-001  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 3:00:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.43	s.u.			Field	03/25/2013 1500
Conductivity	1827	µmhos/cm			Field	03/25/2013 1500
Dissolved Oxygen	1.42	mg/L			Field	03/25/2013 1500
Dissolved Oxygen (pct)	13.0	%			Field	03/25/2013 1500
Turbidity	108	NTU			Field	03/25/2013 1500
Temperature	10.4	°C			Field	03/25/2013 1500
Oxygen Reduction Potential (ORP)	+52	mV			Field	03/25/2013 1500
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	576	mg/L		5	SM 2320B	03/27/2013 1601 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	555	mg/L		5	SM 2320B	03/27/2013 1601 KV
Alkalinity, Carbonate as CO <sub>3</sub>	73	mg/L		5	SM 2320B	03/27/2013 1601 KV
Chloride	5	mg/L		1	EPA 300.0	03/29/2013 056 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	03/27/2013 1601 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1334 RH
Sulfate	383	mg/L		1	EPA 300.0	03/29/2013 056 AMB
Calcium	3	mg/L		1	EPA 200.7	03/28/2013 1621 BK
Magnesium	ND	mg/L		1	EPA 200.7	03/28/2013 1621 BK
Potassium	16	mg/L		1	EPA 200.7	03/28/2013 1621 BK
Sodium	479	mg/L		1	EPA 200.7	03/28/2013 1621 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1105 RH
Silica as SiO <sub>2</sub>	8.8	mg/L		0.1	EPA 200.7	03/28/2013 1621 BK
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	03/27/2013 1601 KV
Electrical Conductivity	1720	µmhos/cm		5	SM 2510B	03/27/2013 1601 KV
Total Dissolved Solids (180)	1220	mg/L		10	SM 2540	03/28/2013 1521 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1403 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 000 CJM
Sodium Adsorption Ratio	77.9			0.1	Calculation	04/05/2013 1358 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-001  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 3:00:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	21.37	meq/L		0.01	SM 1030E	04/05/2013 1358 SL
Anion Sum	19.69	meq/L		0.01	SM 1030E	04/05/2013 1358 SL
Cation-Anion Balance (± 5%)	4.08	%		0.01	SM 1030E	04/05/2013 1358 SL
Solids, Total Dissolved (Calc)	1240	mg/L		10	SM 1030E	04/05/2013 1358 SL
<b>Metals - Dissolved</b>						
Aluminum	0.2	mg/L		0.1	EPA 200.7	03/28/2013 1621 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 1111 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 1111 MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/28/2013 1621 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 1111 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1621 BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 1111 MS
Iron	0.05	mg/L		0.05	EPA 200.7	03/28/2013 1621 BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 1111 MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1621 BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1036 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 1111 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1621 BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/28/2013 1111 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 1111 MS
Uranium	0.0012	mg/L		0.0003	EPA 200.8	03/28/2013 1111 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 1111 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1621 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/02/2013 1438 MS
<b>Metals - Total</b>						
Iron	1.04	mg/L		0.05	EPA 200.7	03/28/2013 1853 DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1853 DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1147 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-001  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 3:00:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/22/2013 1825	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Beta	9.3	pCi/L		3	SM 7110B	04/22/2013 1825	SH
Gross Beta Precision (±)	3.4	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/26/2013 1634	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/26/2013 1634	SH
Lead 210	ND	pCi/L		1	OTW01	04/18/2013 1353	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 1353	SH
Polonium 210	2.7	pCi/L		1	OTW01	04/18/2013 1738	SH
Polonium 210 Precision (±)	0.6	pCi/L			OTW01	04/18/2013 1738	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1319	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/11/2013 1319	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/13/2013 1308	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/13/2013 1308	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/15/2013 1037	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/15/2013 1037	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/19/2013 1220	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/19/2013 1220	SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1413	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1413	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 813	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-002  
**ClientSample ID:** FD-5368-43-24OZ  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 3:10:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.40	s.u.			Field	03/25/2013 1510
Conductivity	1831	µmhos/cm			Field	03/25/2013 1510
Dissolved Oxygen	1.71	mg/L			Field	03/25/2013 1510
Dissolved Oxygen (pct)	15.7	%			Field	03/25/2013 1510
Turbidity	74.4	NTU			Field	03/25/2013 1510
Temperature	10.5	°C			Field	03/25/2013 1510
Oxygen Reduction Potential (ORP)	+47	mV			Field	03/25/2013 1510
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	576	mg/L		5	SM 2320B	03/27/2013 1611 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	558	mg/L		5	SM 2320B	03/27/2013 1611 KV
Alkalinity, Carbonate as CO <sub>3</sub>	71	mg/L		5	SM 2320B	03/27/2013 1611 KV
Chloride	4	mg/L		1	EPA 300.0	03/29/2013 157 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	03/27/2013 1611 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1335 RH
Sulfate	370	mg/L		1	EPA 300.0	03/29/2013 157 AMB
Calcium	3	mg/L		1	EPA 200.7	03/28/2013 1623 BK
Magnesium	ND	mg/L		1	EPA 200.7	03/28/2013 1623 BK
Potassium	15	mg/L		1	EPA 200.7	03/28/2013 1623 BK
Sodium	473	mg/L		1	EPA 200.7	03/28/2013 1623 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1106 RH
Silica as SiO <sub>2</sub>	8.6	mg/L		0.1	EPA 200.7	03/28/2013 1623 BK
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	03/27/2013 1611 KV
Electrical Conductivity	1730	µmhos/cm		5	SM 2510B	03/27/2013 1611 KV
Total Dissolved Solids (180)	1210	mg/L		10	SM 2540	03/28/2013 1522 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1404 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 000 CJM
Sodium Adsorption Ratio	78.5			0.1	Calculation	04/05/2013 1358 SL

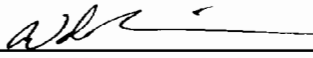
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-002  
**ClientSample ID:** FD-5368-43-24OZ  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 3:10:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	21.08	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Anion Sum	19.40	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Cation-Anion Balance (± 5%)	4.15	%		0.01	SM 1030E	04/05/2013 1358	SL
Solids, Total Dissolved (Calc)	1220	mg/L		10	SM 1030E	04/05/2013 1358	SL
<b>Metals - Dissolved</b>							
Aluminum	0.1	mg/L		0.1	EPA 200.7	03/28/2013 1623	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 1130	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 1130	MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/28/2013 1623	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 1130	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1623	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 1130	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/28/2013 1623	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 1130	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1623	BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1042	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 1130	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1623	BK
Selenium	0.006	mg/L		0.005	EPA 200.8	03/28/2013 1130	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 1130	MS
Uranium	0.0011	mg/L		0.0003	EPA 200.8	03/28/2013 1130	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 1130	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1623	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/02/2013 1443	MS
<b>Metals - Total</b>							
Iron	1.00	mg/L		0.05	EPA 200.7	03/28/2013 1856	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1856	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1209	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-002  
**ClientSample ID:** FD-5368-43-24OZ  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 3:10:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	2.6	pCi/L		2	SM 7110B	04/22/2013 1825 SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	04/22/2013 1825 SH
Gross Beta	5.2	pCi/L		3	SM 7110B	04/22/2013 1825 SH
Gross Beta Precision (±)	3.5	pCi/L			SM 7110B	04/22/2013 1825 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/26/2013 2358 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/26/2013 2358 SH
Lead 210	ND	pCi/L		1	OTW01	04/18/2013 1353 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 1353 SH
Polonium 210	1.2	pCi/L		1	OTW01	04/18/2013 1738 SH
Polonium 210 Precision (±)	0.4	pCi/L			OTW01	04/18/2013 1738 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1319 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/11/2013 1319 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/13/2013 1609 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/13/2013 1609 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/15/2013 1037 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/15/2013 1037 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	04/19/2013 1432 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/19/2013 1432 SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1413 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1413 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 813 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 813 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-003  
**ClientSample ID:** 5368-43-24SM  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 6:05:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.84	s.u.			Field	03/25/2013 1805
Conductivity	1729	µmhos/cm			Field	03/25/2013 1805
Dissolved Oxygen	0.92	mg/L			Field	03/25/2013 1805
Dissolved Oxygen (pct)	8.6	%			Field	03/25/2013 1805
Turbidity	7.75	NTU			Field	03/25/2013 1805
Temperature	10.7	°C			Field	03/25/2013 1805
Oxygen Reduction Potential (ORP)	-37	mV			Field	03/25/2013 1805
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	568	mg/L		5	SM 2320B	03/27/2013 1621 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	629	mg/L		5	SM 2320B	03/27/2013 1621 KV
Alkalinity, Carbonate as CO <sub>3</sub>	31	mg/L		5	SM 2320B	03/27/2013 1621 KV
Chloride	6	mg/L		1	EPA 300.0	03/29/2013 210 AMB
Fluoride	0.9	mg/L		0.1	SM 4500FC	03/27/2013 1621 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1336 RH
Sulfate	372	mg/L		1	EPA 300.0	03/29/2013 210 AMB
Calcium	4	mg/L		1	EPA 200.7	03/28/2013 1626 BK
Magnesium	2	mg/L		1	EPA 200.7	03/28/2013 1626 BK
Potassium	6	mg/L		1	EPA 200.7	03/28/2013 1626 BK
Sodium	460	mg/L		1	EPA 200.7	03/28/2013 1626 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1107 RH
Silica as SiO <sub>2</sub>	8.1	mg/L		0.1	EPA 200.7	03/28/2013 1626 BK
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	03/27/2013 1621 KV
Electrical Conductivity	1690	µmhos/cm		5	SM 2510B	03/27/2013 1621 KV
Total Dissolved Solids (180)	1190	mg/L		10	SM 2540	03/28/2013 1523 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1405 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 000 CJM
Sodium Adsorption Ratio	46.5			0.1	Calculation	04/05/2013 1358 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-003  
**ClientSample ID:** 5368-43-24SM  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 6:05:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	20.50	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Anion Sum	19.30	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Cation-Anion Balance (± 5%)	3.03	%		0.01	SM 1030E	04/05/2013 1358	SL
Solids, Total Dissolved (Calc)	1200	mg/L		10	SM 1030E	04/05/2013 1358	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/28/2013 1626	BK
Arsenic	0.009	mg/L		0.005	EPA 200.8	03/28/2013 1135	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 1135	MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/28/2013 1626	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 1135	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1626	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 1135	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/28/2013 1626	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 1135	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1626	BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1049	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 1135	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1626	BK
Selenium	0.008	mg/L		0.005	EPA 200.8	03/28/2013 1135	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 1135	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	03/28/2013 1135	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 1135	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1626	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/02/2013 1448	MS
<b>Metals - Total</b>							
Iron	0.20	mg/L		0.05	EPA 200.7	03/28/2013 1901	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1901	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1217	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-003  
**ClientSample ID:** 5368-43-24SM  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/25/2013 6:05:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	04/22/2013 1825 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/22/2013 1825 SH
Gross Beta	5.7	pCi/L		3	SM 7110B	04/22/2013 1825 SH
Gross Beta Precision (±)	3.5	pCi/L			SM 7110B	04/22/2013 1825 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/27/2013 1030 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/27/2013 1030 SH
Lead 210	ND	pCi/L		1	OTW01	04/18/2013 1353 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 1353 SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 1738 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 1738 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1319 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/11/2013 1319 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/13/2013 1910 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/13/2013 1910 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 813 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 813 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	04/19/2013 1432 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/19/2013 1432 SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1413 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1413 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 813 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 813 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/11/2013 3:55:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.84	s.u.			Field	03/11/2013 1555
Conductivity	810	µmhos/cm			Field	03/11/2013 1555
Dissolved Oxygen	3.07	mg/L			Field	03/11/2013 1555
Dissolved Oxygen (pct)	26.0	%			Field	03/11/2013 1555
Turbidity	25.2	NTU			Field	03/11/2013 1555
Temperature	6.9	°C			Field	03/11/2013 1555
Oxygen Reduction Potential (ORP)	+202	mV			Field	03/11/2013 1555
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	349	mg/L		5	SM 2320B	03/14/2013 1755 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	406	mg/L		5	SM 2320B	03/14/2013 1755 KV
Alkalinity, Carbonate as CO <sub>3</sub>	10	mg/L		5	SM 2320B	03/14/2013 1755 KV
Chloride	5	mg/L		1	EPA 300.0	03/15/2013 149 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/14/2013 1755 KV
Nitrogen, Nitrate+Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	03/27/2013 1322 RH
Sulfate	70	mg/L		1	EPA 300.0	03/15/2013 149 AMB
Calcium	43	mg/L		1	EPA 200.7	03/15/2013 1139 BK
Magnesium	21	mg/L		1	EPA 200.7	03/15/2013 1139 BK
Potassium	11	mg/L		1	EPA 200.7	03/15/2013 1139 BK
Sodium	97	mg/L		1	EPA 200.7	03/15/2013 1139 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1555 RH
Silica as SiO <sub>2</sub>	10.9	mg/L		0.1	EPA 200.7	03/14/2013 1546 DG
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/14/2013 1755 KV
Electrical Conductivity	729	µmhos/cm		5	SM 2510B	03/14/2013 1755 KV
Total Dissolved Solids (180)	510	mg/L		10	SM 2540	03/13/2013 1756 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/20/2013 1505 RH
Nitrogen, Nitrate (as N)	0.5	mg/L		0.1	EPA 353.2	03/27/2013 1322 RH
Sodium Adsorption Ratio	3.0			0.1	Calculation	04/09/2013 1312 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/11/2013 3:55:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	8.34	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Anion Sum	8.62	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Cation-Anion Balance (± 5%)	1.66	%		0.01	SM 1030E	04/09/2013 1312	WN
Solids, Total Dissolved (Calc)	470	mg/L		10	SM 1030E	04/09/2013 1312	WN
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1139	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1533	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1533	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/15/2013 1139	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1533	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1139	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1533	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1139	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1533	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/15/2013 1139	BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1051	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1533	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1139	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1533	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1533	MS
Uranium	0.0561	mg/L		0.0003	EPA 200.8	03/14/2013 1533	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1533	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1139	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1300	MS
<b>Metals - Total</b>							
Iron	0.65	mg/L		0.05	EPA 200.7	03/18/2013 2022	DG
Manganese	0.02	mg/L		0.02	EPA 200.7	03/18/2013 2022	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1114	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/11/2013 3:55:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	37.0	pCi/L		2	SM 7110B	04/03/2013 2142 SH
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	04/03/2013 2142 SH
Gross Beta	21.3	pCi/L		3	SM 7110B	04/03/2013 2142 SH
Gross Beta Precision (±)	1.7	pCi/L			SM 7110B	04/03/2013 2142 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/16/2013 906 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/16/2013 906 SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1144 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1144 SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1541 SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/28/2013 035 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/28/2013 035 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 955 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 955 MB
<b>Radionuclides - Suspended</b>						
Lead 210	1.7	pCi/L		1	OTW01	04/02/2013 1911 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 1911 SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1658 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1658 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123 SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 1418 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 1418 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-002  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 1:35:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.50	s.u.			Field	04/03/2013 1335
Conductivity	1308	µmhos/cm			Field	04/03/2013 1335
Dissolved Oxygen	1.03	mg/L			Field	04/03/2013 1335
Dissolved Oxygen (pct)	9.8	%			Field	04/03/2013 1335
Turbidity	2.76	NTU			Field	04/03/2013 1335
Temperature	12.7	°C			Field	04/03/2013 1335
Oxygen Reduction Potential (ORP)	-38	mV			Field	04/03/2013 1335
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	421	mg/L		5	SM 2320B	04/06/2013 313 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	389	mg/L		5	SM 2320B	04/06/2013 313 KV
Alkalinity, Carbonate as CO <sub>3</sub>	61	mg/L		5	SM 2320B	04/06/2013 313 KV
Chloride	5	mg/L		1	EPA 300.0	04/08/2013 1623 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	04/06/2013 313 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1617 RH
Sulfate	235	mg/L		1	EPA 300.0	04/08/2013 1623 AMB
Calcium	2	mg/L		1	EPA 200.7	04/09/2013 1637 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/09/2013 1637 BK
Potassium	5	mg/L		1	EPA 200.7	04/09/2013 1637 BK
Sodium	323	mg/L		1	EPA 200.7	04/09/2013 1637 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	04/10/2013 1128 RH
Silica as SiO <sub>2</sub>	8.0	mg/L		0.1	EPA 200.7	04/09/2013 1637 BK
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	04/06/2013 313 KV
Electrical Conductivity	1360	µmhos/cm		5	SM 2510B	04/06/2013 313 KV
Total Dissolved Solids (180)	990	mg/L		10	SM 2540	04/05/2013 1737 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 1131 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 000 CJM
Sodium Adsorption Ratio	72.7			0.1	Calculation	04/22/2013 1131 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-002  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 1:35:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	14.24	meq/L		0.01	SM 1030E	04/22/2013 1131 LJK
Anion Sum	13.49	meq/L		0.01	SM 1030E	04/22/2013 1131 LJK
Cation-Anion Balance (± 5%)	2.69	%		0.01	SM 1030E	04/22/2013 1131 LJK
Solids, Total Dissolved (Calc)	830	mg/L		10	SM 1030E	04/22/2013 1131 LJK
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	04/09/2013 1637 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	04/05/2013 2048 MS
Barium	ND	mg/L		0.5	EPA 200.8	04/05/2013 2048 MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/09/2013 1637 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/05/2013 2048 MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1637 BK
Copper	ND	mg/L		0.01	EPA 200.8	04/05/2013 2048 MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1637 BK
Lead	ND	mg/L		0.02	EPA 200.8	04/05/2013 2048 MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1637 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1130 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/05/2013 2048 MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1637 BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/05/2013 2048 MS
Silver	ND	mg/L		0.003	EPA 200.8	04/05/2013 2048 MS
Uranium	0.0100	mg/L		0.0003	EPA 200.8	04/05/2013 2048 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/05/2013 2048 MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1637 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1312 MS
<b>Metals - Total</b>						
Iron	0.07	mg/L		0.05	EPA 200.7	04/09/2013 2206 BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 2206 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1202 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-002  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 1:35:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	29.5	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	3.0	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	6.0	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/26/2013 1920	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/26/2013 1920	SH
Lead 210	2.1	pCi/L		1	OTW01	05/08/2013 1648	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	05/08/2013 1648	SH
Polonium 210	12.6	pCi/L		1	OTW01	05/08/2013 1326	SH
Polonium 210 Precision (±)	2.6	pCi/L			OTW01	05/08/2013 1326	SH
Radium 226	0.6	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1350	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/22/2013 1350	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/23/2013 2053	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/23/2013 2053	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 1238	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 1238	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.2	pCi/L		1	OTW01	05/08/2013 1430	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	05/08/2013 1430	SH
Polonium 210	27.1	pCi/L		1	OTW01	05/08/2013 1128	SH
Polonium 210 Precision (±)	4.0	pCi/L			OTW01	05/08/2013 1128	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1257	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1257	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-001  
**ClientSample ID:** 5368-32-23SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 1:10:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.54	s.u.			Field	04/03/2013 1310
Conductivity	1396	µmhos/cm			Field	04/03/2013 1310
Dissolved Oxygen	1.12	mg/L			Field	04/03/2013 1310
Dissolved Oxygen (pct)	10.6	%			Field	04/03/2013 1310
Turbidity	1.47	NTU			Field	04/03/2013 1310
Temperature	12.6	°C			Field	04/03/2013 1310
Oxygen Reduction Potential (ORP)	-85	mV			Field	04/03/2013 1310
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	520	mg/L		5	SM 2320B	04/06/2013 237 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	482	mg/L		5	SM 2320B	04/06/2013 237 KV
Alkalinity, Carbonate as CO <sub>3</sub>	75	mg/L		5	SM 2320B	04/06/2013 237 KV
Chloride	3	mg/L		1	EPA 300.0	04/08/2013 1610 AMB
Fluoride	1.8	mg/L		0.1	SM 4500FC	04/06/2013 237 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1616 RH
Sulfate	203	mg/L		1	EPA 300.0	04/08/2013 1610 AMB
Calcium	2	mg/L		1	EPA 200.7	04/09/2013 1635 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/09/2013 1635 BK
Potassium	9	mg/L		1	EPA 200.7	04/09/2013 1635 BK
Sodium	358	mg/L		1	EPA 200.7	04/09/2013 1635 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	04/10/2013 1127 RH
Silica as SiO <sub>2</sub>	7.4	mg/L		0.1	EPA 200.7	04/09/2013 1635 BK
<b>General Parameters</b>						
pH	9.4	s.u.		0.1	SM 4500 H B	04/06/2013 237 KV
Electrical Conductivity	1460	µmhos/cm		5	SM 2510B	04/06/2013 237 KV
Total Dissolved Solids (180)	1060	mg/L		10	SM 2540	04/05/2013 1736 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 1130 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 000 CJM
Sodium Adsorption Ratio	63.4			0.1	Calculation	04/22/2013 1131 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-001  
**ClientSample ID:** 5368-32-23SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 1:10:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	15.93	meq/L		0.01	SM 1030E	04/22/2013 1131 LJK
Anion Sum	14.81	meq/L		0.01	SM 1030E	04/22/2013 1131 LJK
Cation-Anion Balance (± 5%)	3.64	%		0.01	SM 1030E	04/22/2013 1131 LJK
Solids, Total Dissolved (Calc)	900	mg/L		10	SM 1030E	04/22/2013 1131 LJK
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	04/09/2013 1635 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	04/05/2013 2043 MS
Barium	ND	mg/L		0.5	EPA 200.8	04/05/2013 2043 MS
Boron	0.5	mg/L		0.1	EPA 200.7	04/09/2013 1635 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/05/2013 2043 MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1635 BK
Copper	ND	mg/L		0.01	EPA 200.8	04/05/2013 2043 MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1635 BK
Lead	ND	mg/L		0.02	EPA 200.8	04/05/2013 2043 MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1635 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1128 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/05/2013 2043 MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1635 BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/05/2013 2043 MS
Silver	ND	mg/L		0.003	EPA 200.8	04/05/2013 2043 MS
Uranium	0.0009	mg/L		0.0003	EPA 200.8	04/05/2013 2043 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/05/2013 2043 MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1635 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1307 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 2204 BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 2204 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1200 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-001  
**ClientSample ID:** 5368-32-23SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 1:10:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	2.6	pCi/L		2	SM 7110B	04/29/2013 2115 SH
Gross Alpha Precision (±)	1.7	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Beta	6.9	pCi/L		3	SM 7110B	04/29/2013 2115 SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/26/2013 1316 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/26/2013 1316 SH
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1648 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1648 SH
Polonium 210	ND	pCi/L		1	OTW01	05/08/2013 1326 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1326 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1350 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/22/2013 1350 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/23/2013 1752 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/23/2013 1752 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 1238 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 1238 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1430 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1430 SH
Polonium 210	ND	pCi/L		1	OTW01	05/08/2013 1128 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1128 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036 SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1257 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1257 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-003  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 4:30:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.11	s. u.			Field	03/27/2013 1630
Conductivity	1546	µmhos/cm			Field	03/27/2013 1630
Dissolved Oxygen	1.08	mg/L			Field	03/27/2013 1630
Dissolved Oxygen (pct)	10.5	%			Field	03/27/2013 1630
Turbidity	284	NTU			Field	03/27/2013 1630
Temperature	12.3	°C			Field	03/27/2013 1630
Oxygen Reduction Potential (ORP)	+24	mV			Field	03/27/2013 1630
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	486	mg/L		5	SM 2320B	04/01/2013 1655 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	511	mg/L		5	SM 2320B	04/01/2013 1655 KV
Alkalinity, Carbonate as CO <sub>3</sub>	41	mg/L		5	SM 2320B	04/01/2013 1655 KV
Chloride	8	mg/L		1	EPA 300.0	04/02/2013 537 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	04/01/2013 1655 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1351 RH
Sulfate	285	mg/L		1	EPA 300.0	04/02/2013 537 AMB
Calcium	4	mg/L		1	EPA 200.7	03/28/2013 1859 BK
Magnesium	1	mg/L		1	EPA 200.7	03/28/2013 1859 BK
Potassium	6	mg/L		1	EPA 200.7	03/28/2013 1859 BK
Sodium	388	mg/L		1	EPA 200.7	03/28/2013 1859 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1114 RH
Silica as SiO <sub>2</sub>	9.5	mg/L		0.1	EPA 200.7	03/28/2013 1859 BK
<b>General Parameters</b>						
pH	8.9	s. u.		0.1	SM 4500 H B	04/01/2013 1655 KV
Electrical Conductivity	1430	µmhos/cm		5	SM 2510B	04/01/2013 1655 KV
Total Dissolved Solids (180)	1020	mg/L		10	SM 2540	04/11/2013 854 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1411 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1351 RH
Sodium Adsorption Ratio	43.2			0.1	Calculation	04/17/2013 1045 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-003  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 4:30:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	17.31	meq/L		0.01	SM 1030E	04/17/2013 1045	LJK
Anion Sum	15.97	meq/L		0.01	SM 1030E	04/17/2013 1045	LJK
Cation-Anion Balance (± 5%)	4.00	%		0.01	SM 1030E	04/17/2013 1045	LJK
Solids, Total Dissolved (Calc)	990	mg/L		10	SM 1030E	04/17/2013 1045	LJK
<b>Metals - Dissolved</b>							
Aluminum	0.4	mg/L		0.1	EPA 200.7	03/28/2013 1859	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 2100	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 2100	MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/28/2013 1859	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 2100	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1859	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 2100	MS
Iron	0.14	mg/L		0.05	EPA 200.7	03/28/2013 1859	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 2100	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1859	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1044	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 2100	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1859	BK
Selenium	0.006	mg/L		0.005	EPA 200.8	03/28/2013 2100	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 2100	MS
Uranium	0.0291	mg/L		0.0003	EPA 200.8	03/28/2013 2100	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 2100	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1859	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/04/2013 1425	MS
<b>Metals - Total</b>							
Iron	12.5	mg/L		0.05	EPA 200.7	04/02/2013 1833	DG
Manganese	0.19	mg/L		0.02	EPA 200.7	04/02/2013 1833	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1142	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-003  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 4:30:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	43.9	pCi/L		2	SM 7110B	04/23/2013 2155 SH
Gross Alpha Precision (±)	3.8	pCi/L			SM 7110B	04/23/2013 2155 SH
Gross Beta	9.8	pCi/L		3	SM 7110B	04/23/2013 2155 SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	04/23/2013 2155 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/29/2013 2104 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/29/2013 2104 SH
Lead 210	4.9	pCi/L		1	OTW01	04/22/2013 1237 SH
Lead 210 Precision (±)	1.0	pCi/L			OTW01	04/22/2013 1237 SH
Polonium 210	2.6	pCi/L		1	OTW01	04/22/2013 939 SH
Polonium 210 Precision (±)	0.8	pCi/L			OTW01	04/22/2013 939 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1524 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/11/2013 1524 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 1316 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 1316 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1847 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1847 MB
<b>Radionuclides - Suspended</b>						
Lead 210	1.3	pCi/L		1	OTW01	04/30/2013 1532 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/30/2013 1532 SH
Polonium 210	3.0	pCi/L		1	OTW01	04/24/2013 1615 SH
Polonium 210 Precision (±)	0.4	pCi/L			OTW01	04/24/2013 1615 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1805 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 801 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 801 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-004  
**ClientSample ID:** FD-5368-41-36OZ  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 4:40:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.12	s.u.			Field	03/27/2013 1640
Conductivity	1531	µmhos/cm			Field	03/27/2013 1640
Dissolved Oxygen	1.03	mg/L			Field	03/27/2013 1640
Dissolved Oxygen (pct)	9.9	%			Field	03/27/2013 1640
Turbidity	262	NTU			Field	03/27/2013 1640
Temperature	12.2	°C			Field	03/27/2013 1640
Oxygen Reduction Potential (ORP)	+14	mV			Field	03/27/2013 1640
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	487	mg/L		5	SM 2320B	04/01/2013 1704 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	524	mg/L		5	SM 2320B	04/01/2013 1704 KV
Alkalinity, Carbonate as CO <sub>3</sub>	35	mg/L		5	SM 2320B	04/01/2013 1704 KV
Chloride	8	mg/L		1	EPA 300.0	04/02/2013 549 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	04/01/2013 1704 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1352 RH
Sulfate	286	mg/L		1	EPA 300.0	04/02/2013 549 AMB
Calcium	4	mg/L		1	EPA 200.7	03/28/2013 1904 BK
Magnesium	1	mg/L		1	EPA 200.7	03/28/2013 1904 BK
Potassium	6	mg/L		1	EPA 200.7	03/28/2013 1904 BK
Sodium	386	mg/L		1	EPA 200.7	03/28/2013 1904 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1120 RH
Silica as SiO <sub>2</sub>	9.7	mg/L		0.1	EPA 200.7	03/28/2013 1904 BK
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	04/01/2013 1704 KV
Electrical Conductivity	1440	µmhos/cm		5	SM 2510B	04/01/2013 1704 KV
Total Dissolved Solids (180)	1020	mg/L		10	SM 2540	04/11/2013 855 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1412 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1352 RH
Sodium Adsorption Ratio	43.7			0.1	Calculation	04/17/2013 1045 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-004  
**ClientSample ID:** FD-5368-41-36OZ  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 4:40:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	17.24	meq/L		0.01	SM 1030E	04/17/2013 1045	LJK
Anion Sum	16.00	meq/L		0.01	SM 1030E	04/17/2013 1045	LJK
Cation-Anion Balance (± 5%)	3.73	%		0.01	SM 1030E	04/17/2013 1045	LJK
Solids, Total Dissolved (Calc)	990	mg/L		10	SM 1030E	04/17/2013 1045	LJK
<b>Metals - Dissolved</b>							
Aluminum	0.5	mg/L		0.1	EPA 200.7	03/28/2013 1904	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 2105	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 2105	MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/28/2013 1904	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 2105	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1904	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 2105	MS
Iron	0.13	mg/L		0.05	EPA 200.7	03/28/2013 1904	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 2105	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1904	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1046	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 2105	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1904	BK
Selenium	0.006	mg/L		0.005	EPA 200.8	03/28/2013 2105	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 2105	MS
Uranium	0.0249	mg/L		0.0003	EPA 200.8	03/28/2013 2105	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 2105	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1904	BK
<b>Metals - Suspended</b>							
Uranium	0.0004	mg/L		0.0003	EPA 200.8	04/04/2013 1431	MS
<b>Metals - Total</b>							
Iron	13.0	mg/L		0.05	EPA 200.7	04/02/2013 1836	DG
Manganese	0.19	mg/L		0.02	EPA 200.7	04/02/2013 1836	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1144	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-004  
**ClientSample ID:** FD-5368-41-36OZ  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 4:40:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	39.2	pCi/L		2	SM 7110B	04/23/2013 2155 SH
Gross Alpha Precision (±)	3.5	pCi/L			SM 7110B	04/23/2013 2155 SH
Gross Beta	12.4	pCi/L		3	SM 7110B	04/23/2013 2155 SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	04/23/2013 2155 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/30/2013 915 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/30/2013 915 SH
Lead 210	2.8	pCi/L		1	OTW01	04/22/2013 1237 SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	04/22/2013 1237 SH
Polonium 210	1.7	pCi/L		1	OTW01	04/22/2013 939 SH
Polonium 210 Precision (±)	0.9	pCi/L			OTW01	04/22/2013 939 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1524 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/11/2013 1524 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 1616 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 1616 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1847 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1847 MB
<b>Radionuclides - Suspended</b>						
Lead 210	1.4	pCi/L		1	OTW01	04/30/2013 1532 SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	04/30/2013 1532 SH
Polonium 210	3.0	pCi/L		1	OTW01	04/24/2013 1615 SH
Polonium 210 Precision (±)	0.9	pCi/L			OTW01	04/24/2013 1615 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/15/2013 1805 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 803 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 803 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-002  
**ClientSample ID:** 5368-41-36SM  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 1:30:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.52	s.u.			Field	03/27/2013 1330
Conductivity	1245	µmhos/cm			Field	03/27/2013 1330
Dissolved Oxygen	1.18	mg/L			Field	03/27/2013 1330
Dissolved Oxygen (pct)	10.9	%			Field	03/27/2013 1330
Turbidity	987	NTU			Field	03/27/2013 1330
Temperature	10.6	°C			Field	03/27/2013 1330
Oxygen Reduction Potential (ORP)	+41	mV			Field	03/27/2013 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	446	mg/L		5	SM 2320B	04/01/2013 1646 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	177	mg/L		5	SM 2320B	04/01/2013 1646 KV
Alkalinity, Carbonate as CO <sub>3</sub>	180	mg/L		5	SM 2320B	04/01/2013 1646 KV
Chloride	6	mg/L		1	EPA 300.0	04/02/2013 524 AMB
Fluoride	1.6	mg/L		0.1	SM 4500FC	04/01/2013 1646 KV
Nitrogen, Nitrate+Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	04/16/2013 1327 RH
Sulfate	235	mg/L		1	EPA 300.0	04/02/2013 524 AMB
Calcium	2	mg/L		1	EPA 200.7	03/28/2013 1857 BK
Magnesium	ND	mg/L		1	EPA 200.7	03/28/2013 1857 BK
Potassium	12	mg/L		1	EPA 200.7	03/28/2013 1857 BK
Sodium	320	mg/L		1	EPA 200.7	03/28/2013 1857 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	04/02/2013 1113 RH
Silica as SiO <sub>2</sub>	13.2	mg/L		0.1	EPA 200.7	03/28/2013 1857 BK
<b>General Parameters</b>						
pH	10.1	s.u.		0.1	SM 4500 H B	04/01/2013 1646 KV
Electrical Conductivity	1280	µmhos/cm		5	SM 2510B	04/01/2013 1646 KV
Total Dissolved Solids (180)	850	mg/L		10	SM 2540	04/11/2013 853 JCG
Nitrogen, Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	03/28/2013 1410 RH
Nitrogen, Nitrate (as N)	0.7	mg/L		0.1	EPA 353.2	04/16/2013 1327 RH
Sodium Adsorption Ratio	62.8			0.1	Calculation	04/17/2013 1045 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-002  
**ClientSample ID:** 5368-41-36SM  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 1:30:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	14.33	meq/L		0.01	SM 1030E	04/17/2013 1045 LJK
Anion Sum	14.10	meq/L		0.01	SM 1030E	04/17/2013 1045 LJK
Cation-Anion Balance (± 5%)	0.82	%		0.01	SM 1030E	04/17/2013 1045 LJK
Solids, Total Dissolved (Calc)	860	mg/L		10	SM 1030E	04/17/2013 1045 LJK
<b>Metals - Dissolved</b>						
Aluminum	0.5	mg/L		0.1	EPA 200.7	03/28/2013 1857 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 2056 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 2056 MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/28/2013 1857 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 2056 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1857 BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 2056 MS
Iron	0.15	mg/L		0.05	EPA 200.7	03/28/2013 1857 BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 2056 MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1857 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1037 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 2056 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1857 BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/28/2013 2056 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 2056 MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	03/28/2013 2056 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 2056 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1857 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/04/2013 1420 MS
<b>Metals - Total</b>						
Iron	32.3	mg/L		0.05	EPA 200.7	04/02/2013 1824 DG
Manganese	0.58	mg/L		0.02	EPA 200.7	04/02/2013 1824 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1140 CS

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	C Calculated Value	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

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-002  
**ClientSample ID:** 5368-41-36SM  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 1:30:00 PM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.1	pCi/L		2	SM 7110B	04/22/2013 1825	SH
Gross Alpha Precision (±)	1.4	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Beta	6.1	pCi/L		3	SM 7110B	04/22/2013 1825	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/29/2013 1502	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/29/2013 1502	SH
Lead 210	ND	pCi/L		1	OTW01	04/22/2013 1237	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 1237	SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 939	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 939	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1524	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/11/2013 1524	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 1015	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 1015	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1847	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1847	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/26/2013 926	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/26/2013 926	SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1615	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1615	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/15/2013 1805	SH
Thorium 230	0.2	pCi/L		0.2	ACW10	04/16/2013 1717	MB
Thorium 230 Precision (±)	0.1	pCi/L			ACW10	04/16/2013 1717	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-005  
**ClientSample ID:** 5368-31-35SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 11:45:00 AM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.82	s.u.			Field	03/26/2013 1145
Conductivity	1065	µmhos/cm			Field	03/26/2013 1145
Dissolved Oxygen	1.31	mg/L			Field	03/26/2013 1145
Dissolved Oxygen (pct)	11.9	%			Field	03/26/2013 1145
Turbidity	41.2	NTU			Field	03/26/2013 1145
Temperature	10.1	°C			Field	03/26/2013 1145
Oxygen Reduction Potential (ORP)	-61	mV			Field	03/26/2013 1145
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	475	mg/L		5	SM 2320B	03/27/2013 1659 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	371	mg/L		5	SM 2320B	03/27/2013 1659 KV
Alkalinity, Carbonate as CO <sub>3</sub>	102	mg/L		5	SM 2320B	03/27/2013 1659 KV
Chloride	6	mg/L		1	EPA 300.0	03/29/2013 234 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/27/2013 1659 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1345 RH
Sulfate	84	mg/L		1	EPA 300.0	03/29/2013 234 AMB
Calcium	2	mg/L		1	EPA 200.7	03/28/2013 1630 BK
Magnesium	ND	mg/L		1	EPA 200.7	03/28/2013 1630 BK
Potassium	7	mg/L		1	EPA 200.7	03/28/2013 1630 BK
Sodium	263	mg/L		1	EPA 200.7	03/28/2013 1630 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1109 RH
Silica as SiO <sub>2</sub>	6.3	mg/L		0.1	EPA 200.7	03/28/2013 1630 BK
<b>General Parameters</b>						
pH	9.6	s.u.		0.1	SM 4500 H B	03/27/2013 1659 KV
Electrical Conductivity	982	µmhos/cm		5	SM 2510B	03/27/2013 1659 KV
Total Dissolved Solids (180)	640	mg/L		10	SM 2540	03/28/2013 1525 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1407 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 000 CJM
Sodium Adsorption Ratio	51.1			0.1	Calculation	04/05/2013 1358 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-005  
**ClientSample ID:** 5368-31-35SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 11:45:00 AM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	11.71	meq/L		0.01	SM 1030E	04/05/2013 1358 SL
Anion Sum	11.42	meq/L		0.01	SM 1030E	04/05/2013 1358 SL
Cation-Anion Balance (± 5%)	1.25	%		0.01	SM 1030E	04/05/2013 1358 SL
Solids, Total Dissolved (Calc)	650	mg/L		10	SM 1030E	04/05/2013 1358 SL
<b>Metals - Dissolved</b>						
Aluminum	0.1	mg/L		0.1	EPA 200.7	03/28/2013 1630 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 1155 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 1155 MS
Boron	ND	mg/L		0.1	EPA 200.7	03/28/2013 1630 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 1155 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1630 BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 1155 MS
Iron	0.11	mg/L		0.05	EPA 200.7	03/28/2013 1630 BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 1155 MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1630 BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1053 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 1155 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1630 BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/28/2013 1155 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 1155 MS
Uranium	0.0111	mg/L		0.0003	EPA 200.8	03/28/2013 1155 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 1155 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1630 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/02/2013 1458 MS
<b>Metals - Total</b>						
Iron	0.74	mg/L		0.05	EPA 200.7	03/28/2013 1910 DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1910 DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1220 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-005  
**ClientSample ID:** 5368-31-35SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 11:45:00 AM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	16.6	pCi/L		2	SM 7110B	04/22/2013 1825	SH
Gross Alpha Precision (±)	2.3	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Beta	10.3	pCi/L		3	SM 7110B	04/22/2013 1825	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/28/2013 1212	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/28/2013 1212	SH
Lead 210	ND	pCi/L		1	OTW01	04/19/2013 1220	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/19/2013 1220	SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1319	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/11/2013 1319	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 112	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 112	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 813	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/19/2013 1432	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/19/2013 1432	SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1413	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1413	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 1218	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 1218	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-003  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 6:15:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.23	s.u.			Field	04/02/2013 1815
Conductivity	1332	µmhos/cm			Field	04/02/2013 1815
Dissolved Oxygen	1.43	mg/L			Field	04/02/2013 1815
Dissolved Oxygen (pct)	13.8	%			Field	04/02/2013 1815
Turbidity	21.9	NTU			Field	04/02/2013 1815
Temperature	12.4	°C			Field	04/02/2013 1815
Oxygen Reduction Potential (ORP)	-44	mV			Field	04/02/2013 1815
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	431	mg/L		5	SM 2320B	04/04/2013 2231 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	442	mg/L		5	SM 2320B	04/04/2013 2231 KV
Alkalinity, Carbonate as CO <sub>3</sub>	42	mg/L		5	SM 2320B	04/04/2013 2231 KV
Chloride	8	mg/L		1	EPA 300.0	04/12/2013 1623 KB
Fluoride	0.9	mg/L		0.1	SM 4500FC	04/04/2013 2231 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1508 RH
Sulfate	245	mg/L		1	EPA 300.0	04/06/2013 1103 AMB
Calcium	2	mg/L		1	EPA 200.7	04/05/2013 1200 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/16/2013 1138 DG
Potassium	4	mg/L		1	EPA 200.7	04/05/2013 1200 DG
Sodium	352	mg/L		1	EPA 200.7	04/05/2013 1200 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	04/10/2013 1120 RH
Silica as SiO <sub>2</sub>	8.0	mg/L		0.1	EPA 200.7	04/05/2013 1200 DG
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	04/04/2013 2231 KV
Electrical Conductivity	1460	µmhos/cm		5	SM 2510B	04/04/2013 2231 KV
Total Dissolved Solids (180)	970	mg/L		10	SM 2540	04/05/2013 1636 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/04/2013 1453 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1508 RH
Sodium Adsorption Ratio	67.7			0.1	Calculation	04/17/2013 1039 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-003  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 6:15:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	15.54	meq/L		0.01	SM 1030E	04/17/2013 1039 LJK
Anion Sum	14.13	meq/L		0.01	SM 1030E	04/17/2013 1039 LJK
Cation-Anion Balance (± 5%)	4.75	%		0.01	SM 1030E	04/17/2013 1039 LJK
Solids, Total Dissolved (Calc)	880	mg/L		10	SM 1030E	04/17/2013 1039 LJK
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	04/05/2013 1200 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	04/04/2013 1530 MS
Barium	ND	mg/L		0.5	EPA 200.8	04/04/2013 1530 MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/05/2013 1200 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/04/2013 1530 MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/05/2013 1200 DG
Copper	ND	mg/L		0.01	EPA 200.8	04/04/2013 1530 MS
Iron	0.06	mg/L		0.05	EPA 200.7	04/05/2013 1200 DG
Lead	ND	mg/L		0.02	EPA 200.8	04/04/2013 1530 MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/05/2013 1200 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1105 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/04/2013 1530 MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/05/2013 1200 DG
Selenium	ND	mg/L		0.005	EPA 200.8	04/04/2013 1530 MS
Silver	ND	mg/L		0.003	EPA 200.8	04/04/2013 1530 MS
Uranium	0.0013	mg/L		0.0003	EPA 200.8	04/04/2013 1530 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/04/2013 1530 MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/05/2013 1200 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1257 MS
<b>Metals - Total</b>						
Iron	0.53	mg/L		0.05	EPA 200.7	04/05/2013 1620 DG
Manganese	ND	mg/L		0.02	EPA 200.7	04/05/2013 1620 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1129 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-003  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 6:15:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.4	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	1.4	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	3.1	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/11/2013 2226	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/11/2013 2226	SH
Lead 210	ND	pCi/L		1	OTW01	05/02/2013 1550	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/02/2013 1550	SH
Polonium 210	ND	pCi/L		1	OTW01	05/06/2013 1048	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/06/2013 1048	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1231	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/18/2013 1231	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/23/2013 1150	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/23/2013 1150	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 842	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 842	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1430	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1430	SH
Polonium 210	1.5	pCi/L		1	OTW01	05/08/2013 1128	SH
Polonium 210 Precision (±)	1.1	pCi/L			OTW01	05/08/2013 1128	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1257	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1257	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-004  
**ClientSample ID:** 5368-12-25SM  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 6:20:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.97	s.u.			Field	04/02/2013 1820
Conductivity	1288	µmhos/cm			Field	04/02/2013 1820
Dissolved Oxygen	1.30	mg/L			Field	04/02/2013 1820
Dissolved Oxygen (pct)	12.7	%			Field	04/02/2013 1820
Turbidity	346	NTU			Field	04/02/2013 1820
Temperature	12.1	°C			Field	04/02/2013 1820
Oxygen Reduction Potential (ORP)	-62	mV			Field	04/02/2013 1820
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	403	mg/L		5	SM 2320B	04/04/2013 2244 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	329	mg/L		5	SM 2320B	04/04/2013 2244 KV
Alkalinity, Carbonate as CO <sub>3</sub>	80	mg/L		5	SM 2320B	04/04/2013 2244 KV
Chloride	10	mg/L		1	EPA 300.0	04/12/2013 1636 KB
Fluoride	1.3	mg/L		0.1	SM 4500FC	04/04/2013 2244 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1510 RH
Sulfate	222	mg/L		1	EPA 300.0	04/06/2013 1116 AMB
Calcium	2	mg/L		1	EPA 200.7	04/05/2013 1202 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/16/2013 1140 DG
Potassium	10	mg/L		1	EPA 200.7	04/05/2013 1202 DG
Sodium	326	mg/L		1	EPA 200.7	04/16/2013 1140 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/10/2013 1121 RH
Silica as SiO <sub>2</sub>	9.2	mg/L		0.1	EPA 200.7	04/05/2013 1202 DG
<b>General Parameters</b>						
pH	9.6	s.u.		0.1	SM 4500 H B	04/04/2013 2244 KV
Electrical Conductivity	1390	µmhos/cm		5	SM 2510B	04/04/2013 2244 KV
Total Dissolved Solids (180)	940	mg/L		10	SM 2540	04/05/2013 1637 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/04/2013 1454 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1510 RH
Sodium Adsorption Ratio	71.4			0.1	Calculation	04/17/2013 1039 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-004  
**ClientSample ID:** 5368-12-25SM  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 6:20:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	14.51	meq/L		0.01	SM 1030E	04/17/2013 1039	LJK
Anion Sum	13.17	meq/L		0.01	SM 1030E	04/17/2013 1039	LJK
Cation-Anion Balance (± 5%)	4.82	%		0.01	SM 1030E	04/17/2013 1039	LJK
Solids, Total Dissolved (Calc)	820	mg/L		10	SM 1030E	04/17/2013 1039	LJK
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	04/05/2013 1202	DG
Arsenic	0.009	mg/L		0.005	EPA 200.8	04/04/2013 1535	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/04/2013 1535	MS
Boron	0.4	mg/L		0.1	EPA 200.7	04/05/2013 1202	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	04/04/2013 1535	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/05/2013 1202	DG
Copper	ND	mg/L		0.01	EPA 200.8	04/04/2013 1535	MS
Iron	0.11	mg/L		0.05	EPA 200.7	04/05/2013 1202	DG
Lead	ND	mg/L		0.02	EPA 200.8	04/04/2013 1535	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/05/2013 1202	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1107	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/04/2013 1535	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/05/2013 1202	DG
Selenium	0.011	mg/L		0.005	EPA 200.8	04/04/2013 1535	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/04/2013 1535	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	04/04/2013 1535	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/04/2013 1535	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/05/2013 1202	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1302	MS
<b>Metals - Total</b>							
Iron	8.19	mg/L		0.05	EPA 200.7	04/05/2013 1622	DG
Manganese	0.15	mg/L		0.02	EPA 200.7	04/05/2013 1622	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/05/2013 1131	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/22/2013  
**Report ID:** S1304089001

**ProjectName:** Kendrick  
**Lab ID:** S1304089-004  
**ClientSample ID:** 5368-12-25SM  
**COC:** 148997

**WorkOrder:** S1304089  
**CollectionDate:** 4/2/2013 6:20:00 PM  
**DateReceived:** 4/3/2013 7:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	8.2	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/12/2013 1416	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/12/2013 1416	SH
Lead 210	ND	pCi/L		1	OTW01	05/02/2013 1550	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/02/2013 1550	SH
Polonium 210	ND	pCi/L		1	OTW01	05/06/2013 1048	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/06/2013 1048	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/18/2013 1231	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/18/2013 1231	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/23/2013 1451	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/23/2013 1451	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 842	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 842	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1430	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1430	SH
Polonium 210	ND	pCi/L		1	OTW01	05/08/2013 1128	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1128	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1257	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1257	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 9:20:00 AM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.19	s.u.			Field	03/27/2013 920
Conductivity	1316	µmhos/cm			Field	03/27/2013 920
Dissolved Oxygen	1.48	mg/L			Field	03/27/2013 920
Dissolved Oxygen (pct)	12.4	%			Field	03/27/2013 920
Turbidity	12.29	NTU			Field	03/27/2013 920
Temperature	6.7	°C			Field	03/27/2013 920
Oxygen Reduction Potential (ORP)	-10	mV			Field	03/27/2013 920
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	538	mg/L		5	SM 2320B	04/01/2013 1635 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	642	mg/L		5	SM 2320B	04/01/2013 1635 KV
Alkalinity, Carbonate as CO <sub>3</sub>	7	mg/L		5	SM 2320B	04/01/2013 1635 KV
Chloride	3	mg/L		1	EPA 300.0	04/02/2013 511 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	04/01/2013 1635 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1348 RH
Sulfate	171	mg/L		1	EPA 300.0	04/02/2013 511 AMB
Calcium	19	mg/L		1	EPA 200.7	03/28/2013 1855 BK
Magnesium	11	mg/L		1	EPA 200.7	03/28/2013 1855 BK
Potassium	29	mg/L		1	EPA 200.7	03/28/2013 1855 BK
Sodium	292	mg/L		1	EPA 200.7	03/28/2013 1855 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1112 RH
Silica as SiO <sub>2</sub>	11.0	mg/L		0.1	EPA 200.7	03/28/2013 1855 BK
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	04/01/2013 1635 KV
Electrical Conductivity	1210	µmhos/cm		5	SM 2510B	04/01/2013 1635 KV
Total Dissolved Solids (180)	840	mg/L		10	SM 2540	03/28/2013 1550 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1409 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1348 RH
Sodium Adsorption Ratio	13.2			0.1	Calculation	04/17/2013 1045 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 9:20:00 AM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	15.30	meq/L		0.01	SM 1030E	04/17/2013 1045 LJK
Anion Sum	14.39	meq/L		0.01	SM 1030E	04/17/2013 1045 LJK
Cation-Anion Balance (± 5%)	3.06	%		0.01	SM 1030E	04/17/2013 1045 LJK
Solids, Total Dissolved (Calc)	860	mg/L		10	SM 1030E	04/17/2013 1045 LJK
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/28/2013 1855 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/28/2013 2026 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 2026 MS
Boron	0.1	mg/L		0.1	EPA 200.7	03/28/2013 1855 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 2026 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1855 BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 2026 MS
Iron	0.23	mg/L		0.05	EPA 200.7	03/28/2013 1855 BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 2026 MS
Manganese	0.02	mg/L		0.02	EPA 200.7	03/28/2013 1855 BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1013 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 2026 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1855 BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/28/2013 2026 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 2026 MS
Uranium	0.0151	mg/L		0.0003	EPA 200.8	03/28/2013 2026 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 2026 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1855 BK
<b>Metals - Suspended</b>						
Uranium	0.0008	mg/L		0.0003	EPA 200.8	04/04/2013 1415 MS
<b>Metals - Total</b>						
Iron	0.63	mg/L		0.05	EPA 200.7	04/02/2013 1817 DG
Manganese	0.03	mg/L		0.02	EPA 200.7	04/02/2013 1817 DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/02/2013 1133 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303444001

**ProjectName:** Kendrick  
**Lab ID:** S1303444-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 143950

**WorkOrder:** S1303444  
**CollectionDate:** 3/27/2013 9:20:00 AM  
**DateReceived:** 3/28/2013 7:36:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	18.5	pCi/L		2	SM 7110B	04/22/2013 1825 SH
Gross Alpha Precision (±)	2.6	pCi/L			SM 7110B	04/22/2013 1825 SH
Gross Beta	19.1	pCi/L		3	SM 7110B	04/22/2013 1825 SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	04/22/2013 1825 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/29/2013 859 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/29/2013 859 SH
Lead 210	4.4	pCi/L		1	OTW01	04/22/2013 1237 SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	04/22/2013 1237 SH
Polonium 210	ND	pCi/L		1	OTW01	04/22/2013 939 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/22/2013 939 SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1524 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/11/2013 1524 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 714 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 714 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/19/2013 1847 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/19/2013 1847 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	04/26/2013 926 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/26/2013 926 SH
Polonium 210	ND	pCi/L		1	OTW01	04/24/2013 1615 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/24/2013 1615 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1805 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1805 SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 1717 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 1717 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-003  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 5:30:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.91	s.u.			Field	04/03/2013 1730
Conductivity	1329	µmhos/cm			Field	04/03/2013 1730
Dissolved Oxygen	1.14	mg/L			Field	04/03/2013 1730
Dissolved Oxygen (pct)	11.1	%			Field	04/03/2013 1730
Turbidity	334	NTU			Field	04/03/2013 1730
Temperature	13.0	°C			Field	04/03/2013 1730
Oxygen Reduction Potential (ORP)	+91	mV			Field	04/03/2013 1730
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	481	mg/L		5	SM 2320B	04/06/2013 327 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	364	mg/L		5	SM 2320B	04/06/2013 327 KV
Alkalinity, Carbonate as CO <sub>3</sub>	110	mg/L		5	SM 2320B	04/06/2013 327 KV
Chloride	7	mg/L		1	EPA 300.0	04/08/2013 1636 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	04/06/2013 327 KV
Nitrogen, Nitrate+Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	04/16/2013 1331 RH
Sulfate	221	mg/L		1	EPA 300.0	04/08/2013 1636 AMB
Calcium	1	mg/L		1	EPA 200.7	04/09/2013 1639 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/09/2013 1639 BK
Potassium	21	mg/L		1	EPA 200.7	04/09/2013 1639 BK
Sodium	329	mg/L		1	EPA 200.7	04/09/2013 1639 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	04/10/2013 1129 RH
Silica as SiO <sub>2</sub>	10.2	mg/L		0.1	EPA 200.7	04/09/2013 1639 BK
<b>General Parameters</b>						
pH	9.7	s.u.		0.1	SM 4500 H B	04/06/2013 327 KV
Electrical Conductivity	1420	µmhos/cm		5	SM 2510B	04/06/2013 327 KV
Total Dissolved Solids (180)	1030	mg/L		10	SM 2540	04/05/2013 1738 JCG
Nitrogen, Nitrite (as N)	0.1	mg/L		0.1	EPA 353.2	04/05/2013 1132 RH
Nitrogen, Nitrate (as N)	0.1	mg/L		0.1	EPA 353.2	04/16/2013 000 CJM
Sodium Adsorption Ratio	80.7			0.1	Calculation	04/22/2013 1131 LJK

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-003  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 5:30:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	14.94	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Anion Sum	14.46	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Cation-Anion Balance (± 5%)	1.62	%		0.01	SM 1030E	04/22/2013 1131	LJK
Solids, Total Dissolved (Calc)	880	mg/L		10	SM 1030E	04/22/2013 1131	LJK
<b>Metals - Dissolved</b>							
Aluminum	0.4	mg/L		0.1	EPA 200.7	04/09/2013 1639	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	04/05/2013 2053	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/05/2013 2053	MS
Boron	0.1	mg/L		0.1	EPA 200.7	04/09/2013 1639	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/05/2013 2053	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1639	BK
Copper	ND	mg/L		0.01	EPA 200.8	04/05/2013 2053	MS
Iron	0.21	mg/L		0.05	EPA 200.7	04/09/2013 1639	BK
Lead	ND	mg/L		0.02	EPA 200.8	04/05/2013 2053	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1639	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1132	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/05/2013 2053	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1639	BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/05/2013 2053	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/05/2013 2053	MS
Uranium	0.0308	mg/L		0.0003	EPA 200.8	04/05/2013 2053	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/05/2013 2053	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1639	BK
<b>Metals - Suspended</b>							
Uranium	0.0017	mg/L		0.0003	EPA 200.8	04/23/2013 1317	MS
<b>Metals - Total</b>							
Iron	5.09	mg/L		0.05	EPA 200.7	04/09/2013 2209	BK
Manganese	0.09	mg/L		0.02	EPA 200.7	04/09/2013 2209	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1204	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-003  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 5:30:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	57.7	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	4.9	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	22.0	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	3.1	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/28/2013 207	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/28/2013 207	SH
Lead 210	2.2	pCi/L		1	OTW01	05/08/2013 1648	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	05/08/2013 1648	SH
Polonium 210	1.1	pCi/L		1	OTW01	05/08/2013 1326	SH
Polonium 210 Precision (±)	1.0	pCi/L			OTW01	05/08/2013 1326	SH
Radium 226	0.7	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1350	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/22/2013 1350	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/23/2013 2354	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/23/2013 2354	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 1238	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 1238	MB
<b>Radionuclides - Suspended</b>							
Lead 210	3.9	pCi/L		1	OTW01	05/08/2013 1430	SH
Lead 210 Precision (±)	0.8	pCi/L			OTW01	05/08/2013 1430	SH
Polonium 210	1.3	pCi/L		1	OTW01	05/08/2013 1128	SH
Polonium 210 Precision (±)	1.0	pCi/L			OTW01	05/08/2013 1128	SH
Radium 226	1.7	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	05/06/2013 1036	SH
Thorium 230	0.6	pCi/L		0.2	ACW10	05/09/2013 1257	MB
Thorium 230 Precision (±)	0.2	pCi/L			ACW10	05/09/2013 1257	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-004  
**ClientSample ID:** 5268-21-11SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 6:00:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.18	s.u.			Field	04/03/2013 1800
Conductivity	1332	µmhos/cm			Field	04/03/2013 1800
Dissolved Oxygen	0.90	mg/L			Field	04/03/2013 1800
Dissolved Oxygen (pct)	9.1	%			Field	04/03/2013 1800
Turbidity	7.81	NTU			Field	04/03/2013 1800
Temperature	12.4	°C			Field	04/03/2013 1800
Oxygen Reduction Potential (ORP)	+17	mV			Field	04/03/2013 1800
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	358	mg/L		5	SM 2320B	04/06/2013 340 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	215	mg/L		5	SM 2320B	04/06/2013 340 KV
Alkalinity, Carbonate as CO <sub>3</sub>	110	mg/L		5	SM 2320B	04/06/2013 340 KV
Chloride	18	mg/L		1	EPA 300.0	04/12/2013 1509 KB
Fluoride	1.3	mg/L		0.1	SM 4500FC	04/06/2013 340 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1620 RH
Sulfate	248	mg/L		1	EPA 300.0	04/12/2013 1509 KB
Calcium	2	mg/L		1	EPA 200.7	04/10/2013 1800 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/10/2013 1800 BK
Potassium	11	mg/L		1	EPA 200.7	04/09/2013 1644 BK
Sodium	311	mg/L		1	EPA 200.7	04/09/2013 1644 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	04/10/2013 1130 RH
Silica as SiO <sub>2</sub>	8.9	mg/L		0.1	EPA 200.7	04/09/2013 1644 BK
<b>General Parameters</b>						
pH	9.9	s.u.		0.1	SM 4500 H B	04/06/2013 340 KV
Electrical Conductivity	1360	µmhos/cm		5	SM 2510B	04/06/2013 340 KV
Total Dissolved Solids (180)	970	mg/L		10	SM 2540	04/05/2013 1740 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 1133 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 000 CJM
Sodium Adsorption Ratio	58.9			0.1	Calculation	04/22/2013 1131 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-004  
**ClientSample ID:** 5268-21-11SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 6:00:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	13.92	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Anion Sum	12.92	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Cation-Anion Balance (± 5%)	3.72	%		0.01	SM 1030E	04/22/2013 1131	LJK
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	04/22/2013 1131	LJK
<b>Metals - Dissolved</b>							
Aluminum	0.1	mg/L		0.1	EPA 200.7	04/09/2013 1644	BK
Arsenic	0.018	mg/L		0.005	EPA 200.8	04/05/2013 2058	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/05/2013 2058	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/09/2013 1644	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/05/2013 2058	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1644	BK
Copper	ND	mg/L		0.01	EPA 200.8	04/05/2013 2058	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1644	BK
Lead	ND	mg/L		0.02	EPA 200.8	04/05/2013 2058	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1644	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1134	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/05/2013 2058	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1644	BK
Selenium	0.008	mg/L		0.005	EPA 200.8	04/05/2013 2058	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/05/2013 2058	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	04/05/2013 2058	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/05/2013 2058	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1644	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1332	MS
<b>Metals - Total</b>							
Iron	0.13	mg/L		0.05	EPA 200.7	04/09/2013 2211	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 2211	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1206	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-004  
**ClientSample ID:** 5268-21-11SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/3/2013 6:00:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	04/29/2013 2115 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Beta	4.9	pCi/L		3	SM 7110B	04/29/2013 2115 SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/28/2013 914 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/28/2013 914 SH
Lead 210	ND	pCi/L		1	OTW01	05/13/2013 1610 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/13/2013 1610 SH
Polonium 210	ND	pCi/L		1	OTW01	05/13/2013 1311 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/13/2013 1311 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1350 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/22/2013 1350 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/24/2013 255 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/24/2013 255 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 1238 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 1238 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1648 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1648 SH
Polonium 210	ND	pCi/L		1	OTW01	05/08/2013 1326 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1326 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036 SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1257 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1257 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-003  
**ClientSample ID:** 5268-21-11SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 10:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	12.94	s.u.			Field	03/12/2013 1010
Conductivity	2990	µmhos/cm			Field	03/12/2013 1010
Dissolved Oxygen	4.26	mg/L			Field	03/12/2013 1010
Dissolved Oxygen (pct)	34.3	%			Field	03/12/2013 1010
Turbidity	12.91	NTU			Field	03/12/2013 1010
Temperature	5.6	°C			Field	03/12/2013 1010
Oxygen Reduction Potential (ORP)	-78	mV			Field	03/12/2013 1010
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	345	mg/L		5	SM 2320B	03/14/2013 1809 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/14/2013 1809 KV
Alkalinity, Carbonate as CO <sub>3</sub>	31	mg/L		5	SM 2320B	03/14/2013 1809 KV
Chloride	6	mg/L		1	EPA 300.0	03/26/2013 024 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/14/2013 1809 KV
Nitrogen, Nitrate+Nitrite (as N)	0.9	mg/L		0.1	EPA 353.2	03/27/2013 1323 RH
Sulfate	14	mg/L		1	EPA 300.0	03/26/2013 024 AMB
Calcium	98	mg/L		1	EPA 200.7	04/03/2013 1348 DG
Magnesium	ND	mg/L		1	EPA 200.7	04/03/2013 1348 DG
Potassium	39	mg/L		1	EPA 200.7	04/03/2013 1348 DG
Sodium	77	mg/L		1	EPA 200.7	03/15/2013 1142 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1556 RH
Silica as SiO <sub>2</sub>	6.5	mg/L		0.1	EPA 200.7	03/14/2013 1549 DG
<b>General Parameters</b>						
pH	11.9	s.u.		0.1	SM 4500 H B	03/14/2013 1809 KV
Electrical Conductivity	1610	µmhos/cm		5	SM 2510B	03/14/2013 1809 KV
Total Dissolved Solids (180)	360	mg/L		10	SM 2540	03/28/2013 1605 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/20/2013 1506 RH
Nitrogen, Nitrate (as N)	0.9	mg/L		0.1	EPA 353.2	03/27/2013 1323 RH
Sodium Adsorption Ratio	2.1			0.1	Calculation	04/09/2013 1312 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-003  
**ClientSample ID:** 5268-21-11SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 10:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	9.22	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Anion Sum	7.53	meq/L		0.01	SM 1030E	04/09/2013 1312	WN
Cation-Anion Balance (± 5%)	10.06	%		0.01	SM 1030E	04/09/2013 1312	WN
Solids, Total Dissolved (Calc)	450	mg/L		10	SM 1030E	04/09/2013 1312	WN
<b>Metals - Dissolved</b>							
Aluminum	0.1	mg/L		0.1	EPA 200.7	03/15/2013 1142	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1538	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1538	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/15/2013 1142	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1538	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1142	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1538	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1142	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1538	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/15/2013 1142	BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1053	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1538	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1142	BK
Selenium	0.014	mg/L		0.005	EPA 200.8	03/14/2013 1538	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1538	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	03/14/2013 1538	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1538	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1142	BK
<b>Metals - Suspended</b>							
Uranium	0.0026	mg/L		0.0003	EPA 200.8	03/15/2013 1305	MS
<b>Metals - Total</b>							
Iron	0.18	mg/L		0.05	EPA 200.7	03/18/2013 2037	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/18/2013 2037	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1116	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/23/2013  
**Report ID:** S1303197001

**ProjectName:** Kendrick  
**Lab ID:** S1303197-003  
**ClientSample ID:** 5268-21-11SA  
**COC:** 143948

**WorkOrder:** S1303197  
**CollectionDate:** 3/12/2013 10:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	6.3	pCi/L		4	SM 7110B	04/03/2013 2142	SH
Gross Alpha Precision (±)	2.6	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Beta	34.0	pCi/L		7	SM 7110B	04/03/2013 2142	SH
Gross Beta Precision (±)	4.6	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/16/2013 2216	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/16/2013 2216	SH
Lead 210	1.2	pCi/L		1	OTW01	04/02/2013 1144	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 1144	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850	SH
Radium 226	3.1	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/28/2013 336	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/28/2013 336	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 955	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 955	MB
<b>Radionuclides - Suspended</b>							
Lead 210	2.3	pCi/L		1	OTW01	04/02/2013 1911	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 1911	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1658	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1658	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 1418	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 1418	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-005  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 12:30:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.56	s.u.			Field	04/04/2013 1230
Conductivity	1070	µmhos/cm			Field	04/04/2013 1230
Dissolved Oxygen	1.42	mg/L			Field	04/04/2013 1230
Dissolved Oxygen (pct)	13.7	%			Field	04/04/2013 1230
Turbidity	19.80	NTU			Field	04/04/2013 1230
Temperature	12.6	°C			Field	04/04/2013 1230
Oxygen Reduction Potential (ORP)	-1	mV			Field	04/04/2013 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	397	mg/L		5	SM 2320B	04/06/2013 352 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	337	mg/L		5	SM 2320B	04/06/2013 352 KV
Alkalinity, Carbonate as CO <sub>3</sub>	72	mg/L		5	SM 2320B	04/06/2013 352 KV
Chloride	3	mg/L		1	EPA 300.0	04/08/2013 1804 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	04/06/2013 352 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1621 RH
Sulfate	148	mg/L		1	EPA 300.0	04/08/2013 1804 AMB
Calcium	2	mg/L		1	EPA 200.7	04/09/2013 1658 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/09/2013 1658 BK
Potassium	4	mg/L		1	EPA 200.7	04/09/2013 1658 BK
Sodium	262	mg/L		1	EPA 200.7	04/09/2013 1658 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	04/10/2013 1131 RH
Silica as SiO <sub>2</sub>	7.4	mg/L		0.1	EPA 200.7	04/09/2013 1658 BK
<b>General Parameters</b>						
pH	9.5	s.u.		0.1	SM 4500 H B	04/06/2013 352 KV
Electrical Conductivity	1100	µmhos/cm		5	SM 2510B	04/06/2013 352 KV
Total Dissolved Solids (180)	800	mg/L		10	SM 2540	04/05/2013 1741 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 1134 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 000 CJM
Sodium Adsorption Ratio	56.5			0.1	Calculation	04/22/2013 1131 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-005  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 12:30:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	11.56	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Anion Sum	11.11	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Cation-Anion Balance (± 5%)	1.96	%		0.01	SM 1030E	04/22/2013 1131	LJK
Solids, Total Dissolved (Calc)	660	mg/L		10	SM 1030E	04/22/2013 1131	LJK
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/09/2013 1658	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	04/05/2013 2102	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/05/2013 2102	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/09/2013 1658	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/05/2013 2102	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1658	BK
Copper	ND	mg/L		0.01	EPA 200.8	04/05/2013 2102	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1658	BK
Lead	ND	mg/L		0.02	EPA 200.8	04/05/2013 2102	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1658	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1136	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/05/2013 2102	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1658	BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/05/2013 2102	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/05/2013 2102	MS
Uranium	0.0119	mg/L		0.0003	EPA 200.8	04/05/2013 2102	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/05/2013 2102	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1658	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1337	MS
<b>Metals - Total</b>							
Iron	0.37	mg/L		0.05	EPA 200.7	04/09/2013 2213	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 2213	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1215	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-005  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 12:30:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	25.5	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	3.0	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	7.1	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/28/2013 1627	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/28/2013 1627	SH
Lead 210	3.3	pCi/L		1	OTW01	05/13/2013 1610	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	05/13/2013 1610	SH
Polonium 210	2.3	pCi/L		1	OTW01	05/13/2013 1311	SH
Polonium 210 Precision (±)	0.9	pCi/L			OTW01	05/13/2013 1311	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1350	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/22/2013 1350	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/24/2013 556	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/24/2013 556	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 1238	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 1238	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1648	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1648	SH
Polonium 210	3.6	pCi/L		1	OTW01	05/08/2013 1326	SH
Polonium 210 Precision (±)	1.5	pCi/L			OTW01	05/08/2013 1326	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1702	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1702	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-006  
**ClientSample ID:** FD-5268-12-01OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 12:35:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.56	s.u.			Field	04/04/2013 1235
Conductivity	1087	µmhos/cm			Field	04/04/2013 1235
Dissolved Oxygen	1.66	mg/L			Field	04/04/2013 1235
Dissolved Oxygen (pct)	15.9	%			Field	04/04/2013 1235
Turbidity	14.30	NTU			Field	04/04/2013 1235
Temperature	12.8	°C			Field	04/04/2013 1235
Oxygen Reduction Potential (ORP)	+3	mV			Field	04/04/2013 1235
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	392	mg/L		5	SM 2320B	04/06/2013 405 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	336	mg/L		5	SM 2320B	04/06/2013 405 KV
Alkalinity, Carbonate as CO <sub>3</sub>	70	mg/L		5	SM 2320B	04/06/2013 405 KV
Chloride	3	mg/L		1	EPA 300.0	04/08/2013 1817 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	04/06/2013 405 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1622 RH
Sulfate	148	mg/L		1	EPA 300.0	04/08/2013 1817 AMB
Calcium	2	mg/L		1	EPA 200.7	04/09/2013 1700 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/09/2013 1700 BK
Potassium	4	mg/L		1	EPA 200.7	04/09/2013 1700 BK
Sodium	265	mg/L		1	EPA 200.7	04/09/2013 1700 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	04/10/2013 1132 RH
Silica as SiO <sub>2</sub>	7.4	mg/L		0.1	EPA 200.7	04/09/2013 1700 BK
<b>General Parameters</b>						
pH	9.5	s.u.		0.1	SM 4500 H B	04/06/2013 405 KV
Electrical Conductivity	1100	µmhos/cm		5	SM 2510B	04/06/2013 405 KV
Total Dissolved Solids (180)	790	mg/L		10	SM 2540	04/05/2013 1742 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 1135 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 000 CJM
Sodium Adsorption Ratio	56.1			0.1	Calculation	04/22/2013 1131 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-006  
**ClientSample ID:** FD-5268-12-01OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 12:35:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	11.70	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Anion Sum	11.03	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Cation-Anion Balance (± 5%)	2.93	%		0.01	SM 1030E	04/22/2013 1131	LJK
Solids, Total Dissolved (Calc)	660	mg/L		10	SM 1030E	04/22/2013 1131	LJK
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/09/2013 1700	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	04/05/2013 2132	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/05/2013 2132	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/09/2013 1700	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/05/2013 2132	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1700	BK
Copper	ND	mg/L		0.01	EPA 200.8	04/05/2013 2132	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1700	BK
Lead	ND	mg/L		0.02	EPA 200.8	04/05/2013 2132	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1700	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1138	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/05/2013 2132	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1700	BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/05/2013 2132	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/05/2013 2132	MS
Uranium	0.0104	mg/L		0.0003	EPA 200.8	04/05/2013 2132	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/05/2013 2132	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1700	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1342	MS
<b>Metals - Total</b>							
Iron	0.38	mg/L		0.05	EPA 200.7	04/09/2013 2216	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 2216	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1222	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-006  
**ClientSample ID:** FD-5268-12-01OZ  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 12:35:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	20.9	pCi/L		2	SM 7110B	04/29/2013 2115 SH
Gross Alpha Precision (±)	2.6	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Beta	5.5	pCi/L		3	SM 7110B	04/29/2013 2115 SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	04/29/2013 2115 SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/28/2013 2308 SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/28/2013 2308 SH
Lead 210	3.6	pCi/L		1	OTW01	05/13/2013 1610 SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	05/13/2013 1610 SH
Polonium 210	2.9	pCi/L		1	OTW01	05/13/2013 1311 SH
Polonium 210 Precision (±)	1.0	pCi/L			OTW01	05/13/2013 1311 SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1350 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	04/22/2013 1350 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/24/2013 857 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/24/2013 857 MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 1238 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 1238 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1648 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1648 SH
Polonium 210	2.7	pCi/L		1	OTW01	05/08/2013 1326 SH
Polonium 210 Precision (±)	1.3	pCi/L			OTW01	05/08/2013 1326 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036 SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1702 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1702 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-007  
**ClientSample ID:** 5268-12-01SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 2:00:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.64	s.u.			Field	04/04/2013 1400
Conductivity	1715	µmhos/cm			Field	04/04/2013 1400
Dissolved Oxygen	2.45	mg/L			Field	04/04/2013 1400
Dissolved Oxygen (pct)	25.1	%			Field	04/04/2013 1400
Turbidity	11.19	NTU			Field	04/04/2013 1400
Temperature	15.4	°C			Field	04/04/2013 1400
Oxygen Reduction Potential (ORP)	+72	mV			Field	04/04/2013 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	199	mg/L		5	SM 2320B	04/06/2013 418 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	88	mg/L		5	SM 2320B	04/06/2013 418 KV
Alkalinity, Carbonate as CO <sub>3</sub>	77	mg/L		5	SM 2320B	04/06/2013 418 KV
Chloride	19	mg/L		1	EPA 300.0	04/12/2013 1521 KB
Fluoride	1.7	mg/L		0.1	SM 4500FC	04/06/2013 418 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1629 RH
Sulfate	545	mg/L		1	EPA 300.0	04/12/2013 1521 KB
Calcium	3	mg/L		1	EPA 200.7	04/10/2013 1802 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/10/2013 1802 BK
Potassium	10	mg/L		1	EPA 200.7	04/10/2013 1802 BK
Sodium	399	mg/L		1	EPA 200.7	04/09/2013 1702 BK
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	04/10/2013 1133 RH
Silica as SiO <sub>2</sub>	8.4	mg/L		0.1	EPA 200.7	04/09/2013 1702 BK
<b>General Parameters</b>						
pH	10.1	s.u.		0.1	SM 4500 H B	04/06/2013 418 KV
Electrical Conductivity	1770	µmhos/cm		5	SM 2510B	04/06/2013 418 KV
Total Dissolved Solids (180)	1320	mg/L		10	SM 2540	04/05/2013 1743 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 1136 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 000 CJM
Sodium Adsorption Ratio	65.4			0.1	Calculation	04/22/2013 1131 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-007  
**ClientSample ID:** 5268-12-01SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 2:00:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	17.78	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Anion Sum	16.09	meq/L		0.01	SM 1030E	04/22/2013 1131	LJK
Cation-Anion Balance (± 5%)	4.97	%		0.01	SM 1030E	04/22/2013 1131	LJK
Solids, Total Dissolved (Calc)	1100	mg/L		10	SM 1030E	04/22/2013 1131	LJK
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/09/2013 1702	BK
Arsenic	0.014	mg/L		0.005	EPA 200.8	04/05/2013 2137	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/05/2013 2137	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/09/2013 1702	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/05/2013 2137	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1702	BK
Copper	ND	mg/L		0.01	EPA 200.8	04/05/2013 2137	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1702	BK
Lead	ND	mg/L		0.02	EPA 200.8	04/05/2013 2137	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1702	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1143	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/05/2013 2137	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1702	BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/05/2013 2137	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/05/2013 2137	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	04/05/2013 2137	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/05/2013 2137	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1702	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1401	MS
<b>Metals - Total</b>							
Iron	0.23	mg/L		0.05	EPA 200.7	04/09/2013 2218	BK
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 2218	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/09/2013 1224	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/31/2013  
**Report ID:** S1304123001

**ProjectName:** Kendrick  
**Lab ID:** S1304123-007  
**ClientSample ID:** 5268-12-01SM  
**COC:** 148988

**WorkOrder:** S1304123  
**CollectionDate:** 4/4/2013 2:00:00 PM  
**DateReceived:** 4/5/2013 10:30:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	4.4	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	3.7	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	05/26/2013 1621	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	05/26/2013 1621	SH
Lead 210	ND	pCi/L		1	OTW01	05/13/2013 1610	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/13/2013 1610	SH
Polonium 210	ND	pCi/L		1	OTW01	05/13/2013 1311	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/13/2013 1311	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1350	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/22/2013 1350	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/24/2013 1158	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/24/2013 1158	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/26/2013 1238	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/26/2013 1238	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	05/08/2013 1648	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1648	SH
Polonium 210	ND	pCi/L		1	OTW01	05/08/2013 1326	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/08/2013 1326	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1702	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1702	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-006  
**ClientSample ID:** 5268-12-01SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 1:05:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.20	s.u.			Field	03/26/2013 1305
Conductivity	1282	µmhos/cm			Field	03/26/2013 1305
Dissolved Oxygen	1.48	mg/L			Field	03/26/2013 1305
Dissolved Oxygen (pct)	12.9	%			Field	03/26/2013 1305
Turbidity	25.6	NTU			Field	03/26/2013 1305
Temperature	8.7	°C			Field	03/26/2013 1305
Oxygen Reduction Potential (ORP)	+92	mV			Field	03/26/2013 1305
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	540	mg/L		5	SM 2320B	03/27/2013 1709 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	561	mg/L		5	SM 2320B	03/27/2013 1709 KV
Alkalinity, Carbonate as CO <sub>3</sub>	48	mg/L		5	SM 2320B	03/27/2013 1709 KV
Chloride	4	mg/L		1	EPA 300.0	03/29/2013 247 AMB
Fluoride	0.9	mg/L		0.1	SM 4500FC	03/27/2013 1709 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/03/2013 1346 RH
Sulfate	146	mg/L		1	EPA 300.0	03/29/2013 247 AMB
Calcium	3	mg/L		1	EPA 200.7	03/28/2013 1635 BK
Magnesium	1	mg/L		1	EPA 200.7	03/28/2013 1635 BK
Potassium	7	mg/L		1	EPA 200.7	03/28/2013 1635 BK
Sodium	324	mg/L		1	EPA 200.7	03/28/2013 1635 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2013 1110 RH
Silica as SiO <sub>2</sub>	6.3	mg/L		0.1	EPA 200.7	03/28/2013 1635 BK
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	03/27/2013 1709 KV
Electrical Conductivity	1200	µmhos/cm		5	SM 2510B	03/27/2013 1709 KV
Total Dissolved Solids (180)	810	mg/L		10	SM 2540	03/28/2013 1526 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/28/2013 1408 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/05/2013 000 CJM
Sodium Adsorption Ratio	38.6			0.1	Calculation	04/05/2013 1358 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-006  
**ClientSample ID:** 5268-12-01SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 1:05:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	14.55	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Anion Sum	14.00	meq/L		0.01	SM 1030E	04/05/2013 1358	SL
Cation-Anion Balance (± 5%)	1.92	%		0.01	SM 1030E	04/05/2013 1358	SL
Solids, Total Dissolved (Calc)	820	mg/L		10	SM 1030E	04/05/2013 1358	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/28/2013 1635	BK
Arsenic	0.014	mg/L		0.005	EPA 200.8	03/28/2013 1200	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/28/2013 1200	MS
Boron	0.3	mg/L		0.1	EPA 200.7	03/28/2013 1635	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/28/2013 1200	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/28/2013 1635	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/28/2013 1200	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/28/2013 1635	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/28/2013 1200	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1635	BK
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1055	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/28/2013 1200	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/28/2013 1635	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/28/2013 1200	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/28/2013 1200	MS
Uranium	0.0006	mg/L		0.0003	EPA 200.8	03/28/2013 1200	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/28/2013 1200	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/28/2013 1635	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/02/2013 1503	MS
<b>Metals - Total</b>							
Iron	0.86	mg/L		0.05	EPA 200.7	03/28/2013 1920	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/28/2013 1920	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/28/2013 1222	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 5/9/2013  
**Report ID:** S1303405001

**ProjectName:** Kendrick  
**Lab ID:** S1303405-006  
**ClientSample ID:** 5268-12-01SA  
**COC:** 148998

**WorkOrder:** S1303405  
**CollectionDate:** 3/26/2013 1:05:00 PM  
**DateReceived:** 3/27/2013 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.7	pCi/L		2	SM 7110B	04/22/2013 1825	SH
Gross Alpha Precision (±)	1.6	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Beta	3.5	pCi/L		3	SM 7110B	04/22/2013 1825	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	04/22/2013 1825	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/28/2013 1814	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/28/2013 1814	SH
Lead 210	11.9	pCi/L		1	OTW01	04/19/2013 1220	SH
Lead 210 Precision (±)	0.9	pCi/L			OTW01	04/19/2013 1220	SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/11/2013 1319	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/11/2013 1319	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/14/2013 413	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/14/2013 413	MK
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 813	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/19/2013 1432	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/19/2013 1432	SH
Polonium 210	ND	pCi/L		1	OTW01	04/18/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/18/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/15/2013 1413	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/15/2013 1413	SH
Thorium 230	ND	pCi/L		0.2	ACW10	04/16/2013 1218	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	04/16/2013 1218	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 6/7/2013  
**Report ID:** S1304130001

**ProjectName:** Kendrick  
**Lab ID:** S1304130-001  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 148989

**WorkOrder:** S1304130  
**CollectionDate:** 4/5/2013 12:00:00 PM  
**DateReceived:** 4/8/2013 11:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.03	s.u.			Field	04/05/2013 1200
Conductivity	1286	µmhos/cm			Field	04/05/2013 1200
Dissolved Oxygen	1.78	mg/L			Field	04/05/2013 1200
Dissolved Oxygen (pct)	17.7	%			Field	04/05/2013 1200
Turbidity	7.80	NTU			Field	04/05/2013 1200
Temperature	13.2	°C			Field	04/05/2013 1200
Oxygen Reduction Potential (ORP)	+82	mV			Field	04/05/2013 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	450	mg/L		5	SM 2320B	04/09/2013 1609 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	493	mg/L		5	SM 2320B	04/09/2013 1609 KV
Alkalinity, Carbonate as CO <sub>3</sub>	28	mg/L		5	SM 2320B	04/09/2013 1609 KV
Chloride	11	mg/L		1	EPA 300.0	04/08/2013 2140 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	04/09/2013 1609 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1640 RH
Sulfate	208	mg/L		1	EPA 300.0	04/08/2013 2140 AMB
Calcium	2	mg/L		1	EPA 200.7	04/09/2013 1707 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/09/2013 1707 BK
Potassium	3	mg/L		1	EPA 200.7	04/09/2013 1707 BK
Sodium	334	mg/L		1	EPA 200.7	04/09/2013 1707 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	04/10/2013 1135 RH
Silica as SiO <sub>2</sub>	8.5	mg/L		0.1	EPA 200.7	04/09/2013 1707 BK
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	04/09/2013 1609 KV
Electrical Conductivity	1320	µmhos/cm		5	SM 2510B	04/09/2013 1609 KV
Total Dissolved Solids (180)	860	mg/L		10	SM 2540	04/11/2013 819 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/08/2013 1354 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/15/2013 1640 RH
Sodium Adsorption Ratio	60.9			0.1	Calculation	04/17/2013 1055 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 6/7/2013  
**Report ID:** S1304130001

**ProjectName:** Kendrick  
**Lab ID:** S1304130-001  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 148989

**WorkOrder:** S1304130  
**CollectionDate:** 4/5/2013 12:00:00 PM  
**DateReceived:** 4/8/2013 11:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	14.73	meq/L		0.01	SM 1030E	04/17/2013 1055	LJK
Anion Sum	13.70	meq/L		0.01	SM 1030E	04/17/2013 1055	LJK
Cation-Anion Balance (± 5%)	3.62	%		0.01	SM 1030E	04/17/2013 1055	LJK
Solids, Total Dissolved (Calc)	840	mg/L		10	SM 1030E	04/17/2013 1055	LJK
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/09/2013 1707	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	04/08/2013 1749	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/08/2013 1749	MS
Boron	0.3	mg/L		0.1	EPA 200.7	04/09/2013 1707	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/08/2013 1749	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1707	BK
Copper	ND	mg/L		0.01	EPA 200.8	04/08/2013 1749	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1707	BK
Lead	ND	mg/L		0.02	EPA 200.8	04/08/2013 1749	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1707	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/10/2013 954	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/08/2013 1749	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1707	BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/08/2013 1749	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/08/2013 1749	MS
Uranium	0.0307	mg/L		0.0003	EPA 200.8	04/08/2013 1749	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/08/2013 1749	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1707	BK
<b>Metals - Suspended</b>							
Uranium	0.0005	mg/L		0.0003	EPA 200.8	04/23/2013 1411	MS
<b>Metals - Total</b>							
Iron	0.32	mg/L		0.05	EPA 200.7	04/12/2013 1227	DG
Manganese	ND	mg/L		0.02	EPA 200.7	04/12/2013 1227	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/10/2013 1105	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 6/7/2013  
**Report ID:** S1304130001

**ProjectName:** Kendrick  
**Lab ID:** S1304130-001  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 148989

**WorkOrder:** S1304130  
**CollectionDate:** 4/5/2013 12:00:00 PM  
**DateReceived:** 4/8/2013 11:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	99.3	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	5.5	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	13.9	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	2.5	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	06/06/2013 841	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	06/06/2013 841	SH
Lead 210	6.5	pCi/L		1	OTW01	05/13/2013 1610	SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	05/13/2013 1610	SH
Polonium 210	21.0	pCi/L		1	OTW01	05/13/2013 1311	SH
Polonium 210 Precision (±)	2.9	pCi/L			OTW01	05/13/2013 1311	SH
Radium 226	4.0	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1558	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	04/22/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/24/2013 1459	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/24/2013 1459	MK
Thorium 230	0.2	pCi/L		0.2	ACW10	05/07/2013 810	MB
Thorium 230 Precision (±)	0.2	pCi/L			ACW10	05/07/2013 810	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	05/14/2013 1002	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/14/2013 1002	SH
Polonium 210	20.5	pCi/L		1	OTW01	05/13/2013 1420	SH
Polonium 210 Precision (±)	2.7	pCi/L			OTW01	05/13/2013 1420	SH
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1036	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	05/06/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1702	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1702	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 6/7/2013  
**Report ID:** S1304130001

**ProjectName:** Kendrick  
**Lab ID:** S1304130-002  
**ClientSample ID:** 5368-31-35SM  
**COC:** 148989

**WorkOrder:** S1304130  
**CollectionDate:** 4/5/2013 2:00:00 PM  
**DateReceived:** 4/8/2013 11:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.52	s.u.			Field	04/05/2013 1400
Conductivity	1415	µmhos/cm			Field	04/05/2013 1400
Dissolved Oxygen	1.59	mg/L			Field	04/05/2013 1400
Dissolved Oxygen (pct)	15.8	%			Field	04/05/2013 1400
Turbidity	10.14	NTU			Field	04/05/2013 1400
Temperature	13.2	°C			Field	04/05/2013 1400
Oxygen Reduction Potential (ORP)	+31	mV			Field	04/05/2013 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	405	mg/L		5	SM 2320B	04/09/2013 1622 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	373	mg/L		5	SM 2320B	04/09/2013 1622 KV
Alkalinity, Carbonate as CO <sub>3</sub>	60	mg/L		5	SM 2320B	04/09/2013 1622 KV
Chloride	21	mg/L		1	EPA 300.0	04/08/2013 2152 AMB
Fluoride	2.1	mg/L		0.1	SM 4500FC	04/09/2013 1622 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 1334 RH
Sulfate	257	mg/L		1	EPA 300.0	04/08/2013 2152 AMB
Calcium	2	mg/L		1	EPA 200.7	04/09/2013 1709 BK
Magnesium	ND	mg/L		1	EPA 200.7	04/09/2013 1709 BK
Potassium	13	mg/L		1	EPA 200.7	04/09/2013 1709 BK
Sodium	342	mg/L		1	EPA 200.7	04/09/2013 1709 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	04/10/2013 1136 RH
Silica as SiO <sub>2</sub>	8.0	mg/L		0.1	EPA 200.7	04/09/2013 1709 BK
<b>General Parameters</b>						
pH	9.4	s.u.		0.1	SM 4500 H B	04/09/2013 1622 KV
Electrical Conductivity	1440	µmhos/cm		5	SM 2510B	04/09/2013 1622 KV
Total Dissolved Solids (180)	910	mg/L		10	SM 2540	04/11/2013 820 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	04/08/2013 1355 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	04/16/2013 1334 RH
Sodium Adsorption Ratio	70.3			0.1	Calculation	04/17/2013 1055 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 6/7/2013  
**Report ID:** S1304130001

**ProjectName:** Kendrick  
**Lab ID:** S1304130-002  
**ClientSample ID:** 5368-31-35SM  
**COC:** 148989

**WorkOrder:** S1304130  
**CollectionDate:** 4/5/2013 2:00:00 PM  
**DateReceived:** 4/8/2013 11:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	15.30	meq/L		0.01	SM 1030E	04/17/2013 1055	LJK
Anion Sum	14.15	meq/L		0.01	SM 1030E	04/17/2013 1055	LJK
Cation-Anion Balance (± 5%)	3.90	%		0.01	SM 1030E	04/17/2013 1055	LJK
Solids, Total Dissolved (Calc)	890	mg/L		10	SM 1030E	04/17/2013 1055	LJK
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	04/09/2013 1709	BK
Arsenic	0.013	mg/L		0.005	EPA 200.8	04/08/2013 1808	MS
Barium	ND	mg/L		0.5	EPA 200.8	04/08/2013 1808	MS
Boron	0.4	mg/L		0.1	EPA 200.7	04/09/2013 1709	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	04/08/2013 1808	MS
Chromium	ND	mg/L		0.01	EPA 200.7	04/09/2013 1709	BK
Copper	ND	mg/L		0.01	EPA 200.8	04/08/2013 1808	MS
Iron	ND	mg/L		0.05	EPA 200.7	04/09/2013 1709	BK
Lead	ND	mg/L		0.02	EPA 200.8	04/08/2013 1808	MS
Manganese	ND	mg/L		0.02	EPA 200.7	04/09/2013 1709	BK
Mercury	ND	mg/L		0.001	EPA 245.1	04/10/2013 1001	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	04/08/2013 1808	MS
Nickel	ND	mg/L		0.01	EPA 200.7	04/09/2013 1709	BK
Selenium	ND	mg/L		0.005	EPA 200.8	04/08/2013 1808	MS
Silver	ND	mg/L		0.003	EPA 200.8	04/08/2013 1808	MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	04/08/2013 1808	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	04/08/2013 1808	MS
Zinc	ND	mg/L		0.01	EPA 200.7	04/09/2013 1709	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	04/23/2013 1416	MS
<b>Metals - Total</b>							
Iron	0.88	mg/L		0.05	EPA 200.7	04/12/2013 1231	DG
Manganese	ND	mg/L		0.02	EPA 200.7	04/12/2013 1231	DG
Mercury	ND	mg/L		0.001	EPA 245.1	04/10/2013 1112	CS

These results apply only to the samples tested.

## RL - Reporting Limit

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 6/7/2013  
**Report ID:** S1304130001

**ProjectName:** Kendrick  
**Lab ID:** S1304130-002  
**ClientSample ID:** 5368-31-35SM  
**COC:** 148989

**WorkOrder:** S1304130  
**CollectionDate:** 4/5/2013 2:00:00 PM  
**DateReceived:** 4/8/2013 11:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/29/2013 2115	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Beta	8.4	pCi/L		3	SM 7110B	04/29/2013 2115	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	04/29/2013 2115	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	06/06/2013 1510	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	06/06/2013 1510	SH
Lead 210	ND	pCi/L		1	OTW01	05/13/2013 1610	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/13/2013 1610	SH
Polonium 210	ND	pCi/L		1	OTW01	05/13/2013 1311	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/13/2013 1311	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	04/22/2013 1558	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	04/22/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/24/2013 1800	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/24/2013 1800	MK
Thorium 230	ND	pCi/L		0.2	ACW10	05/07/2013 810	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/07/2013 810	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	05/14/2013 1002	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	05/14/2013 1002	SH
Polonium 210	ND	pCi/L		1	OTW01	05/13/2013 1420	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	05/13/2013 1420	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	05/06/2013 1304	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	05/06/2013 1304	SH
Thorium 230	ND	pCi/L		0.2	ACW10	05/09/2013 1702	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	05/09/2013 1702	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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WWCENGINEERING

\* No Sample

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

## SAMPLING INFORMATION

Sampling Point 5367-34-06 DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 34-06 DM Date Sampled 11/11 Time \_\_\_\_\_ am pm

Describe Sampling Point 6w monitoring well

Well Depth 540 ft below MP Depth to Water (below MP) 84.85 ft Casing Diameter 5 in

Date 6/26/13 Time 0810 (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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

K:\WWC\ADM\FORMS\Monitor Well Sample Form with DO and ORP.doc

## SAMPLING INFORMATION

Sampling Point 5367-34-0602 Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 34-0602 Date Sampled 6/26/13 Time 0915 (am) pm  
 Describe Sampling Point GW monitoring well

Well Depth 320 ft below MP Depth to Water (below MP) 65.98 ft Casing Diameter 5 in  
 Date 6/26/13 Time 0800 (am) pm Casing Volume 256 x 3 = 768 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
 m  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0830	—	—	—	—	—	—	—	—	—	30+
0900	9.33	1915	11.8	31.3	—	—	—	—	—	30
0915	9.40	1957	12.0	9.53	+6	3.21	31.1	—	1500	30

Pumping Start Time 0825 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - IML Quote # 456

LCF

COC# 150412

Form completed by: Red Fuller

Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5367-34-06SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012 ~~145~~ 145.24  
Sample ID# 34-06SM Date Sampled 6/26/13 Time 0940 (am) pm  
Describe Sampling Point 6W monitoring well

Well Depth 220 ft below MP Depth to Water (below MP) 59.32 ~~62.40~~ ft Casing Diameter 5 in  
Date 6/26/13 Time 0805 (am) pm Casing Volume 160X3 gal  
480

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0832	_____	_____	_____	_____	_____	_____	_____	_____	_____	<del>25</del>
0910	9.83	1934	12.33	14.99	_____	_____	_____	_____	_____	25
0940	9.62	1918	12.6	30.3	-12	3.01	28.3	_____	1875	25

Pumping Start Time 0825 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor - IML Quote #456  
2 LCF  
COC# 150412

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5367-34-06 SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 34-06 SA Date Sampled 6 / 13 / 13 Time 1030 (am) pm  
Describe Sampling Point monitoring well

Well Depth 55 ft below MP Depth to Water (below MP) 21.48 ft Casing Diameter 5 in  
Date 6 / 13 / 13 Time 1000 (am) pm Casing Volume \_\_\_\_\_ gal

At least NA bore volumes have been evacuated before sampling

Sampling method ' Submersible pump

Bladder

' Tap

' Bailer

Pump intake or bailer set at 50 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1010	—	—	—	—	—	—	—	—	—	150 mL / 30 sec
1020	8.47	2230	15.4	5.19	—	—	—	—	—	↓
1030	8.55	2260	14.4	3.78	+43	1.62	16.1	—	≈ 3.0	↓

Pumping Start Time 1010 WL \_\_\_\_\_ Pumping End Time 1050 WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles -

IML Quote # 456

LCF - COC # 150404

Form completed by: Rod Fuller

Witnessed by: \_\_\_\_\_

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*\* No Sample*  
**WWCENGINEERING**

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

## SAMPLING INFORMATION

Sampling Point 5368-43-12DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 43-12DM Date Sampled 1-1 Time \_\_\_\_\_ am pm

Describe Sampling Point GW monitoring well

Well Depth 780 ft below MP Depth to Water (below MP) 252.92 ft Casing Diameter 5 in

Date 6/27/13 Time 0800 (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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-43-120Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-120Z Date Sampled 6/27/13 Time 0930 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 615 ft below MP Depth to Water (below MP) 247.17 ft Casing Diameter 5 in  
Date 6/27/13 Time 0750 (am) pm Casing Volume 367 x 3 = 1100 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0820	—	—	—	—	—	—	—	—	—	16.0
0900	9.52	2950	13.2	0.35	—	—	—	—	—	16.0
0930	9.51	3030	13.7	0.08	+5	2.33	22.6	—	1200	16.0

Pumping Start Time 0815 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - IML Quote 456

LCF  
CA # 150166

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-125M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-125M Date Sampled 6/27/13 Time 0945 am pm  
Describe Sampling Point GW monitoring well

Well Depth 480 ft below MP Depth to Water (below MP) 191.50 ft Casing Diameter 5 in  
Date 6/27/13 Time 0755 (am) pm Casing Volume 290  $\times$   $\frac{3}{4}$  gal  
870

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0825	—	—	—	—	—	—	—	—	<del>1350</del>	15.0
0910	9.71	1787	12.5	2.57	—	—	—	—	—	15.0
0945	9.57	1808	13.2	1.81	-68	1.67	15.9	—	1350	15.0

Pumping Start Time 0815 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - FML Quote #456

LCF

COC # 150166

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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# WWCENGINEERING

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

## SAMPLING INFORMATION

Sampling Point 5368-33-14 DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 33-14 DM Date Sampled TT Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 900 ft below MP Depth to Water (below MP) 227.16 ft Casing Diameter \_\_\_\_\_ in  
Date 6 '24 '13 Time 0740 (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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Don Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368 - 33-140Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 33-140Z Date Sampled 6/28/13 Time 0945 am pm  
Describe Sampling Point GW monitoring well

Well Depth 760 ft below MP Depth to Water (below MP) 221.32 ft Casing Diameter 5 in  
Date 6/28/13 Time 0730 (am) pm Casing Volume 539X3 g  
1617 al

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0800										20.0
0845	9.77	1594	13.6	3.99						20.0
0930	9.74	1593	13.6	1.61						20.0
0945	9.69	1604	13.9	2.73	+105	2.83	27.9		2300	20.0

Pumping Start Time 0750 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - Fuel Quote #456

LCF

CCC # 150166

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-33-145M Project Kendrick  
Location \_\_\_\_\_ W.O.# 202145-24  
Sample ID# 33-145M Date Sampled 6/28/13 Time 1030 am pm  
Describe Sampling Point GW monitoring well

Well Depth 630 ft below MP Depth to Water (below MP) 176.82 ft Casing Diameter 5 in  
Date 6/28/13 Time 0735 am pm Casing Volume 453 x 3 gal  
1359

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: Rubber 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 (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0805										11.0
0850	10.28	1505	13.8	19.86					660	7.0
1000	10.07	1473	13.8	4.01					1150	7.0
1030	9.95	1475	14.0	8.83	+66	1.91	18.5		1360	7.0

Pumping Start Time 0750 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - Imh Quote #456

LCF

COC # 150166

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-33-145A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 33-145A Date Sampled 6/18/13 Time 1440 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 65 ft below MP Depth to Water (below MP) 30.24 ft Casing Diameter 5 in  
Date 6/18/13 Time 1405 am ☒ pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 60 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1410										
1430	7.84	839	19.5	11.63	—	—	—	—	↓	150 mL / 30 sec.
1440	8.03	839	19.6	6.77	+25	1.36	15.4	—	↓	↓
									4.5	

Pumping Start Time 1440 WL \_\_\_\_\_ Pumping End Time 1450 WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles -  
1 mL GW Quater # 456  
LCF - COC # 150406

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_





*\* no sample*  
**WWCENGINEERING**

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

## SAMPLING INFORMATION

Sampling Point 5368-41-23DM Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# \_\_\_\_\_ Date Sampled 1/11 Time \_\_\_\_\_ am pm  
 Describe Sampling Point GW monitoring well

Well Depth 940 ft below MP Depth to Water (below MP) 308.80 ft Casing Diameter 5 in  
 Date 6/27/13 Time 1050 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

gp  
m

x 0.00223

cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-230Z Project Kendrick  
Location \_\_\_\_\_ W.O.# \_\_\_\_\_  
Sample ID# 41-230Z Date Sampled 6/27/13 Time 1510 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 800 ft below MP Depth to Water (below MP) 271.13 ft Casing Diameter 5 in  
Date 6/27/13 Time 1040 ☒ am ☐ pm Casing Volume 529 x 3 = 1587 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1130										10.0
1200	9.41	1570	14.4	311					1000	6.0
1440	9.36	1554	14.9	79.6					1600	6.0
1510	9.37	1557	16.0	57.9	+10	1.52	15.9		1780	6.0

Pumping Start Time 1120 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - IML Quote # 456

HCF

COC # 150166

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-41-235M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-235M Date Sampled 6/27/13 Time 1340 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 710 ft below MP Depth to Water (below MP) 237.63 ft Casing Diameter 5 in  
Date 6/27/13 Time 1045 am ☒ pm Casing Volume 472 x 3 = 1417 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1140										12.0
1230	9.26	1483	14.1	15.03					840	9.0
1340	9.27	1525	14.9	7.24	-42	1.19	11.7		1470	9.0

Pumping Start Time 1120 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor - IML Quote #456

LCF

COC# 150166

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-235A Date Sampled 6/18/13 Time 1330 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 90 ft below MP Depth to Water (below MP) 83.05 ft Casing Diameter 5 in  
Date 6/18/13 Time 1255 am ☒ pm Casing Volume NA gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 85 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1305	—	Started	Pump	—	—	—	—	—	↓	150ml/30sec.
1320	7.38	1142	19.6	26.4	—	—	—	—	↓	↓
1330	7.54	1191	19.3	18.86	-17	1.83	20.4	—	≈4.5	↓

Pumping Start Time 1305 WL \_\_\_\_\_ Pumping End Time 1345 WL \_\_\_\_\_

Comments: water slightly turbid - no odor - 7 sample bottles  
IML GW Quota # 456  
HCF - COC# 150406

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-24-12 ~~DM~~ Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# \_\_\_\_\_ Date Sampled ~~6/12/13~~ Time ~~10~~ am pm  
 Describe Sampling Point GW monitoring well

Well Depth 900 ft below MP Depth to Water (below MP) 314.70 ft Casing Diameter 5 in  
 Date 6/26/13 Time 11:15 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-24-1202 Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 24-1202 Date Sampled 6/26/13 Time 1430 am ☒ pm  
 Describe Sampling Point GW monitoring well

Well Depth 780 ft below MP Depth to Water (below MP) 309.50 ft Casing Diameter 5 in  
 Date 6/26/13 Time 1105 ☒ am ☐ pm Casing Volume 470x3 gal  
1413

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
 x 0.00223  
 \_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1200										10.0
1300	9.60	1925	14.5	0.85					1000	10.0
<del>1400</del>	9.48	1907	14.9	0.35	+17	1.40	14.3		1600	10.0
1430										

Pumping Start Time 1150 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor - IML Quote # 456

LCF

COC # 150412

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-24-12 SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 24-12 SM Date Sampled 6/26/13 Time 1330 am pm  
Describe Sampling Point GW monitoring well

Well Depth 600 ft below MP Depth to Water (below MP) 247.27 ft Casing Diameter 5 in  
Date 6/26/13 Time 1110 am pm Casing Volume 353x3 gal  
1059

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1205</u>	_____	_____	_____	_____	_____	_____	_____	_____	_____	<u>11.0</u>
<u>1300</u>	<u>9.33</u>	<u>1455</u>	<u>13.8</u>	<u>60.1</u>	_____	_____	_____	_____	<u>770</u>	<u>11.0</u>
<u>1330</u>	<u>9.41</u>	<u>1459</u>	<u>14.2</u>	<u>29.3</u>	<u>-43</u>	<u>1.30</u>	<u>13.2</u>	_____	<u>1100</u>	<u>11.0</u>

Pumping Start Time 1150 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water slightly turbid - no odor - Imk Quote #456  
HCF  
COC # 150412

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-24-12 SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 24-125A Date Sampled 6/13/13 Time 1220 am ☒ pm  
Describe Sampling Point monitoring well

Well Depth 125 ft below MP Depth to Water (below MP) 79.51 ft Casing Diameter 5 in  
Date 6/13/13 Time 1140 am ☒ pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 120 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 NA

DISCHARGE RATE	
_____ gpm	
x <u>0.00223</u>	
	_____ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1150	—	Started Pump				—	—	↓	150 ml / 30 sec
1210	9.73	1161	15.7	21.9	—	—	—	↓	↓
1220	9.67	1134	15.4	12.02	+15	$\frac{1.13}{11.5}$	—	4.0	↓

Pumping Start Time 1150 WL \_\_\_\_\_ Pumping End Time 1240 WL \_\_\_\_\_

Comments: water clear - no odor - 7 sample bottles -  
IML Quote # 456  
LCF - COC# 150404

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_





*\* no sample*  
**WWCENGINEERING**

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

## SAMPLING INFORMATION

Sampling Point 5368-43-24 DM Project Kendricks

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 1/1 Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 750 ft below MP Depth to Water (below MP) 230.95 ft Casing Diameter 5 in

Date 6/25/13 Time 1315 am pm Casing Volume \_\_\_\_\_ gal

At least 0.0023 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-240Z Project Kendrick  
Location \_\_\_\_\_ W.O.# \_\_\_\_\_  
Sample ID# 43-240Z Date Sampled 6/25/13 Time 1510 am pm  
Describe Sampling Point GW monitoring well

Well Depth 590 ft below MP Depth to Water (below MP) 238.30 ft Casing Diameter 5 in  
Date 6/25/13 Time 1330 am pm Casing Volume 352x3 gal  
1056

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1400										15
1430	9.66	1921	13.5	113					600	15
1510	9.56	1848	14.4	88.1	+52	1.37	13.5		1200	15

Pumping Start Time 1350 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - IML Quote # 456

HCF

COC# 150411

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-245M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-245M Date Sampled 6/25/13 Time 1610 am pm  
Describe Sampling Point GW monitoring well

Well Depth 458 ft below MP Depth to Water (below MP) 145.97 ft Casing Diameter 5 in  
Date 6/25/13 Time 1335 am (pm) Casing Volume 312 x 3 = 936 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1410										7.0
1530	9.16	1872	16.0	14.24					700	7.0
<del>1610</del> 1610	9.17	1882	14.2	4.73	-100	0.91	9.0		980	7.0

Pumping Start Time 1350 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - odor - IML Quote # 456

LCF

COC# 150411

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-245A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-245A Date Sampled 6/20/13 Time 1110 am pm  
Describe Sampling Point GW monitoring well

Well Depth 45 ft below MP Depth to Water (below MP) 31.04 ft Casing Diameter 5 in  
Date 6/20/13 Time 1030 (am) pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap Bailer \_\_\_\_\_

Pump intake or bailer set at 40 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1055	8.14	864	18.5	21.8	_____	_____	_____	_____	↓	150m4/30Sec
1110	8.12	848	17.5	18.76	-24	1.40	14.8	—	4.5	↓

Pumping Start Time 1040 WL \_\_\_\_\_ Pumping End Time 1120 WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles -  
Fail Quote #356  
HCF - COC # 150408

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-32-230Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 32-230Z Date Sampled 6/24/13 Time 1550 am pm  
Describe Sampling Point GW monitoring well

Well Depth 910 ft below MP Depth to Water (below MP) 360.80 ft Casing Diameter 5 in  
Date 6/24/13 Time 1140 (am pm) Casing Volume 551 x <sup>3</sup>  
1650 gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method

Submersible pump

gp  
m

Tap

Bailer

x 0.00223

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

cfs

Tubing (type: Rubber 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 N/A

### DISCHARGE RATE

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1225</u>										<u>9.0</u>
<u>1535</u>	<u>9.65</u>	<u>1448</u>	<u>14.1</u>	<u>18.03</u>						<u>9.0</u>
<u>1550</u>	<u>9.63</u>	<u>1456</u>	<u>14.2</u>	<u>11.37</u>	<u>-102</u>	<u>1.86</u>	<u>18.9</u>			<u>9.0</u>

Pumping Start Time 1210 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - TML Quote # 456

LCF

COC# 150410

Form completed by: David Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368 -32-23.5m Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 32-235m Date Sampled 6/24/13 Time 1610 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 750 ft below MP Depth to Water (below MP) 319.5 ft Casing Diameter 5 in  
Date 6/24/13 Time 1145 am ☒ pm Casing Volume 430 x 3 = 1290 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: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1230										9.0
1540	9.68	1527	13.3	1.77						
1610	9.67	1532	13.8	0.99	-83	1.41	13.6			9.0

Pumping Start Time 1210 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor - IML Quote #456

LCF

COC # 150410

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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WWCENGINEERING

\* NO Sample-Dry

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## SAMPLING INFORMATION

Sampling Point 5368-32-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-25  
Sample ID# 32-235A Date Sampled 6-12-13 Time \_\_\_\_\_ am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 130 ft below MP Depth to Water (below MP) Dry ft Casing Diameter 5 in  
Date 6-12-13 Time 1545 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Dry

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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\* NO Sample

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## SAMPLING INFORMATION

Sampling Point 5368-41-36 DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 1-1-13 Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 1020 ft below MP Depth to Water (below MP) 392.87 ft Casing Diameter 5 in  
Date 6/20/13 Time 1410 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Rad Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-360Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-360Z Date Sampled 6/24/13 Time 1045 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 720 ft below MP Depth to Water (below MP) 362.10 ft Casing Diameter 5 in  
Date 6/20/13 Time 1355 am (pm) Casing Volume 358 x 3 gal  
1074

At least 34 bore volumes have been evacuated before sampling

Sampling method Submersible pump  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1450										5.0
1720	9.44	1616	13.4	36.2						5.0
1750	- SHUT OFF PUMP -								900	
6/24/13 @ 0935	- started pump -									5.0
1045	9.39	1525	14.1	15.63	+9	1.02	10.1		1250	5.0

Pumping Start Time 1430 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - Impl Quote #456

LCF

COC# 150410

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-36SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-36SM Date Sampled 6/24/13 Time 1000 am pm  
Describe Sampling Point GW monitoring well

Well Depth 585 ft below MP Depth to Water (below MP) 320.29 ft Casing Diameter 5 in  
Date 6/20/13 Time 1400 am pm Casing Volume 265 x 3 gal  
795

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1455										6.0
1503	Ran out of water - Let recharge - 1723 started pump.									
1730	1030	1453	12.0	555	- 1750 RAN OUT OF WATER					
6/24/13	@ 0935 - Started pump									
1000	1050	1412	12.8	110	+68	1.01	9.6	-		6.0
1010									570	

Pumping Start Time 6/20/13 1430 WL \_\_\_\_\_ Pumping End Time 6/24/13 1010 WL \_\_\_\_\_

Comments: Water turbid - no odor - no 3 casing volumes, but did pump until water ran out and let recharge 3 times.  
HCF - COC# 150410 - Fml Quote #556

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



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## SAMPLING INFORMATION

Sampling Point 5368-41-36 SA Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 1/1/13 Time \_\_\_\_\_ am pm

Describe Sampling Point GW monitoring well

Well Depth 120 ft below MP Depth to Water (below MP) Dry ft Casing Diameter \_\_\_\_\_ in

Date 6/20/13 Time 1405 ~~PM~~ 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Dry

Form completed by: \_\_\_\_\_

Witnessed by: \_\_\_\_\_

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# WWCENGINEERING

\* No Sample

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## SAMPLING INFORMATION

Sampling Point 5368 - 31 - 35 DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 1/1 Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 1200 ft below MP Depth to Water (below MP) 435.41 ft Casing Diameter 5 in

Date 6/19/13 Time 1045 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: \_\_\_\_\_

Form completed by: \_\_\_\_\_ Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368 - 31 - 350Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-350Z Date Sampled 6 / 19 / 13 Time 1430 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 990 ft below MP Depth to Water (below MP) 446.59 ft Casing Diameter 5 in  
Date 6 / 19 / 13 Time 1015 am pm Casing Volume 545 g  
1632 al

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: Rubber 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 n/a

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1100										10 GPM
1300	9.42	1401	14.7	5.24					1400	10 GPM
1430	9.37	1347	15.3	2.35	+97	1.31	13.4			10

Pumping Start Time 1040 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles -  
FML Quote # 456  
LCF - COC# 150407

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-31-35SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-35SM Date Sampled 6/19/13 Time 1600 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 875 ft below MP Depth to Water (below MP) 435.55 ft Casing Diameter 5 in  
Date 6/19/13 Time 1020 am pm Casing Volume 440 gal  
1320 gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1105										3.0
1305	10.13	1342	14.8	59.4						2.5
1505	9.86	1420	15.2	14.24						2.5
1600	9.73	1415	16.1	15.27	+11	1.05	10.8			2.5

Pumping Start Time 1040 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - ~~odor~~ no odor - 7 sample bottles - no 3 casing volumes, but sampled on consistent field parameters - LCF - CDC# 150407

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-31-355A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-12  
Sample ID# 31-355A Date Sampled 6/19/13 Time 1400 am pm  
Describe Sampling Point GW monitoring well

Well Depth 130 ft below MP Depth to Water (below MP) 102.41 ft Casing Diameter 5 in  
Date 6/19/13 Time 1320 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 125 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1345	9.43	1324	20.1	46.0	—	—	—	—	1	150ml/30sec
1400	9.46	1328	19.1 <del>20.1</del>	29.7	+92	1.17	13.0	—	4.5	↓

Pumping Start Time 1330 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles -  
IML GW Quota #456  
HCF - COC# 150406

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



\* No Sample

WWCENGINEERING

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

## SAMPLING INFORMATION

Sampling Point 5368-12-25 DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 1-1-13 Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 1180 ft below MP Depth to Water (below MP) 388.94 ft Casing Diameter 5 in  
Date 6-25-13 Time 0810 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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-12-250Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-250Z Date Sampled 6/25/13 Time 1245 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 890 ft below MP Depth to Water (below MP) 383.40 ft Casing Diameter 5 in  
Date 6/25/13 Time 0800 ☒ am ☐ pm Casing Volume 507 x 3 gal  
1521

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0840										6.0
1030	9.65	1412	14.2	91.1					720	6.0
1245	9.44	1386	15.1	50.8	-83	1.55	15.6		1530	6.0

Pumping Start Time 0830 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - IML Quote # 456

HCF

COC# 150411

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-12-25SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-25SM Date Sampled 6/25/13 Time 1300 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 790 ft below MP Depth to Water (below MP) 375.19 ft Casing Diameter 5 in  
Date 6/25/13 Time 0805 am pm Casing Volume 415X3 gal  
1245

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>0845</u>										<u>6.0</u>
<u>1100</u>	<u>10.07</u>	<u>1322</u>	<u>14.1</u>	<u>413</u>					<u>900</u>	<u>3.0</u>
<u>1200</u>	<u>9.82</u>	<u>1314</u>	<u>15.1</u>	<u>196</u>					<u>1080</u>	<u>3.0</u>
<u>1300</u>	<u>9.84</u>	<u>1364</u>	<u>14.7</u>	<u>87.2</u>	<u>-48</u>	<u>1.05</u>	<u>10.3</u>		<u>1260</u>	<u>3.0</u>

Pumping Start Time 0830 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - IML Quote #456

HCF

COC # 150411

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-12-25SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-25SA Date Sampled 6/20/13 Time 1640 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 100 ft below MP Depth to Water (below MP) 68.19 ft Casing Diameter 5 in  
Date 6/20/13 Time 1600 am ☒ pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap Bailer \_\_\_\_\_

Pump intake or bailer set at 95 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<del>1610</del> 1610										150 mL / 30 sec
1630	8.08	1377	19.3	11.88					1	
1640	8.16	1396	18.6	7.56	-83	0.81	8.8		4.5	↓

Pumping Start Time 1610 WL \_\_\_\_\_ Pumping End Time 1700 WL \_\_\_\_\_

Comments: Water clear - no odor - FML Quote #456  
LCF

COC# 150408

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



WWCENGINEERING

\* NO Sample

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

## SAMPLING INFORMATION

Sampling Point 5268-21-11 DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 1/1 Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 1200 ft below MP Depth to Water (below MP) 392.92' Casing Diameter 5 in  
Date 6/18/13 Time 1210 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only.

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-21-110Z Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 21-110Z Date Sampled 6/18/13 Time 0930 (am) pm

Describe Sampling Point \_\_\_\_\_

GW Monitoring Well

Well Depth 1025 ft below MP Depth to Water (below MP) 406.30 ft Casing Diameter 5 in

Date 6/18/13 Time 1110 (am) pm Casing Volume 620X3 = 1856 gal

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: Rubber 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 N/A

### DISCHARGE RATE

gp  
m

x 0.00223

cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1145	—	Started pump				—	—	—	967.5	4.5
1520	9.74	1388	15.1	49.3	—	—	—	—	<del>1020</del>	3.0
1730	—	Shut down pump due to severe thunderstorm								
6/19/13	—	Started pump @ 0800								4.5
0830	9.78	1389	13.7	10.50	—	—	—	—		
0930	9.76	1394	14.4	7.76	-2	1.27	12.4	—		4.0

Pumping Start Time 1145 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - no 3 casing volumes, but collected sample based on consistent field per.  
LCF - CDC # 150406

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-21-115M Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 21-115M Date Sampled 6/18/13 Time 0900 am pm  
 Describe Sampling Point 6W monitoring well

Well Depth 850 ft below MP Depth to Water (below MP) 346.20 ft Casing Diameter 5 in  
 Date 6/18/13 Time 1115 (am) pm Casing Volume 504 x 3 = 1511 gal

At least NA bore volumes have been evacuated before sampling

Sampling method

Submersible pump 1 1/2'

Tap

Bailer

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
 m  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1145										6.0
1530	10.04	1368	14.2	6.65					1350	4.0
<del>1730</del>										
6/19/13										6.0
0830	10.22	1335	13.4	6.49						6.0
0900	10.33	1369	13.7	4.60	+25	1.85	18.2			5.0

Pumping Start Time 1145 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - no 3 casing volumes collected sample due to consistent field par.  
LCF - COC# 150406

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-21-115A Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 21-115A Date Sampled 1-1-13 Time \_\_\_\_\_ am pm  
 Describe Sampling Point GW monitoring well

Well Depth 75 ft below MP Depth to Water (below MP) 52.48 ft Casing Diameter 5 in  
 Date 6/24/13 Time 1310 am pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method Submersible pump  
Redi-flow  
 Tap \_\_\_\_\_ Bailer \_\_\_\_\_

DISCHARGE RATE	
_____	gp m
x <u>0.00223</u>	cfs

Pump intake or bailer set at 72 ft below MP.

Tubing (type: Rubber). (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)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1330	Started pump @ 16GPM but was dropping quickly - set @ 0.25									
1400	11.59	793	17.6	1.93	- Ran out of water @ 1415 - Let recharge					
1500	11.71	821	15.8	@ 16GPM - Ran out of water @ 1505						

Pumping Start Time 1320 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Well does not produce enough water to clean up water - Did not sample

Form completed by: David Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-12-01 DM Project Kendrick  
 Location \_\_\_\_\_ W.O.# \_\_\_\_\_  
 Sample ID# — Date Sampled 11/1 Time — am pm  
 Describe Sampling Point GW monitoring well

Well Depth 1050 ft below MP Depth to Water (below MP) 325.89 ft Casing Diameter 5 in  
 Date 6/20/13 Time 0915 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

gp  
m

x 0.00223

cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Red Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-12-010Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-010Z Date Sampled 6/20/13 Time 1245 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 845 ft below MP Depth to Water (below MP) 328.05 ft Casing Diameter 5 in  
Date 6/20/13 Time 0905 am ☒ pm Casing Volume 517 x 3 gal  
1515

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: Auburn 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0940										8.0
1145	9.90	1249	14.1	23.2					1080	8.0
1245	9.89	1230	14.4	11.33	-111	1.54	15.3		1560	8.0

Pumping Start Time 0930 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - FHL Quote #456

LCF - COC# 150408

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-12-015M Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 12-015M Date Sampled 6/20/13 Time 1300 am ☒ pm  
 Describe Sampling Point GN monitoring well

Well Depth 715 ft below MP Depth to Water (below MP) 319.20 ft Casing Diameter 5 in  
 Date 6/20/13 Time 0910 am ☒ pm Casing Volume 396x3 gal  
1187

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
 x 0.00223  
 \_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>0945</u>										<u>7.0</u>
<del>1000</del>				<u>23.2</u>						
<u>1150</u>	<u>10.90</u>	<u>1764</u>	<u>16.1</u>	<u>12.63</u>						<u>0.5</u>
<u>1230</u>	<u>10.90</u>	<u>1736</u>	<u>16.5</u>	<u>12.29</u>						<u>0.25</u>
<u>1300</u>	<u>10.81</u>	<u>1698</u>	<u>17.2</u>	<u>12.43</u>	<u>-136</u>	<u>1.94</u>	<u>20.0</u>			<u>0.25</u>

Pumping Start Time 0930 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF - COC# 150408

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-12-015A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-015A Date Sampled 6/19/13 Time 1220 am pm  
Describe Sampling Point GW monitoring well

Well Depth 95 ft below MP Depth to Water (below MP) 53.71 ft Casing Diameter 5 in  
Date 6/19/13 Time 1140 (am) pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder  
Tap Bailer \_\_\_\_\_

Pump intake or bailer set at 90 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1150	—	<u>Started pump</u>				—	—	—	1	<u>150ML/30sec</u>
1210	<u>9.24</u>	<u>1329</u>	<u>18.7</u>	<u>15.59</u>	—	—	—	—	1	↓
1220	<u>9.26</u>	<u>1318</u>	<u>18.5</u>	<u>14.53</u>	<u>+79</u>	<u>1.31</u>	<u>14.2</u>	—	<u>4.5</u>	↓

Pumping Start Time 1150 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles - IML  
GW Quote # 456  
LCF - COC # 150406

Form completed by: Don Jull Witnessed by: \_\_\_\_\_

K:\WWCADM\FORMS\Monitor Well Sample Form with DO and ORP.doc



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-001  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 9:15:00 AM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.40	s.u.			Field	06/26/2013 915
Conductivity	1957	µmhos/cm			Field	06/26/2013 915
Dissolved Oxygen	3.21	mg/L			Field	06/26/2013 915
Dissolved Oxygen (pct)	31.1	%			Field	06/26/2013 915
Turbidity	9.53	NTU			Field	06/26/2013 915
Temperature	12.0	°C			Field	06/26/2013 915
Oxygen Reduction Potential (ORP)	+6	mV			Field	06/26/2013 915
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	624	mg/L		5	SM 2320B	06/28/2013 240 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	665	mg/L		5	SM 2320B	06/28/2013 240 KV
Alkalinity, Carbonate as CO <sub>3</sub>	48	mg/L		5	SM 2320B	06/28/2013 240 KV
Chloride	6	mg/L		1	EPA 300.0	06/28/2013 1335 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	06/28/2013 240 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1150 RH
Sulfate	358	mg/L		1	EPA 300.0	06/28/2013 1335 AMB
Calcium	4	mg/L		1	EPA 200.7	06/28/2013 2019 BK
Magnesium	2	mg/L		1	EPA 200.7	06/28/2013 2019 BK
Potassium	7	mg/L		1	EPA 200.7	06/28/2013 2019 BK
Sodium	482	mg/L		1	EPA 200.7	06/28/2013 2019 BK
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	07/05/2013 1243 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	06/28/2013 240 KV
Electrical Conductivity	1920	µmhos/cm		5	SM 2510B	06/28/2013 240 KV
Total Dissolved Solids (180)	1240	mg/L		10	SM 2540	06/28/2013 1319 JCG
<b>Data Quality</b>						
Cation Sum	21.53	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Anion Sum	20.13	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Cation-Anion Balance (± 5%)	3.35	%		0.01	SM 1030E	07/08/2013 1607 SL
Solids, Total Dissolved (Calc)	1230	mg/L		10	SM 1030E	07/08/2013 1607 SL

## These results apply only to the samples tested.

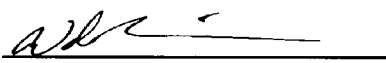
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 12



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-001  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 9:15:00 AM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/28/2013 2019	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/27/2013 1619	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1619	MS
Boron	0.4	mg/L		0.1	EPA 200.7	06/28/2013 2019	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1619	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 2019	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1619	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 2019	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1619	MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/02/2013 1108	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1619	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 2019	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/27/2013 1619	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1619	MS
Uranium	0.0116	mg/L		0.0003	EPA 200.8	06/27/2013 1619	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1619	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 2019	BK
<b>Metals - Suspended</b>							
Uranium	0.0005	mg/L		0.0003	EPA 200.8	07/05/2013 1317	MS
<b>Metals - Total</b>							
Iron	0.23	mg/L		0.05	EPA 200.7	06/29/2013 059	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/29/2013 059	BK

## These results apply only to the samples tested.

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-001  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 9:15:00 AM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	36.7	pCi/L		4	SM 7110B	07/24/2013 1709	SH
Gross Alpha Precision (±)	5.0	pCi/L			SM 7110B	07/24/2013 1709	SH
Gross Beta	8.2	pCi/L		3	SM 7110B	08/08/2013 2131	SH
Gross Beta Precision (±)	4.6	pCi/L			SM 7110B	08/08/2013 2131	SH
Radium 226	1.8	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	07/11/2013 1005	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/31/2013 847	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/31/2013 847	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/15/2013 1209	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/15/2013 1209	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 1500	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 1500	MB

These results apply only to the samples tested.

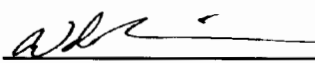
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-002  
**ClientSample ID:** 5367-34-06SM  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 9:40:00 AM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.62	s.u.			Field	06/26/2013 940
Conductivity	1918	µmhos/cm			Field	06/26/2013 940
Dissolved Oxygen	3.01	mg/L			Field	06/26/2013 940
Dissolved Oxygen (pct)	28.3	%			Field	06/26/2013 940
Turbidity	30.3	NTU			Field	06/26/2013 940
Temperature	12.6	°C			Field	06/26/2013 940
Oxygen Reduction Potential (ORP)	-12	mV			Field	06/26/2013 940
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	646	mg/L		5	SM 2320B	06/28/2013 254 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	662	mg/L		5	SM 2320B	06/28/2013 254 KV
Alkalinity, Carbonate as CO <sub>3</sub>	62	mg/L		5	SM 2320B	06/28/2013 254 KV
Chloride	5	mg/L		1	EPA 300.0	06/28/2013 1347 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	06/28/2013 254 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1151 RH
Sulfate	323	mg/L		1	EPA 300.0	06/28/2013 1347 AMB
Calcium	3	mg/L		1	EPA 200.7	06/28/2013 2022 BK
Magnesium	1	mg/L		1	EPA 200.7	06/28/2013 2022 BK
Potassium	22	mg/L		1	EPA 200.7	06/28/2013 2022 BK
Sodium	483	mg/L		1	EPA 200.7	06/28/2013 2022 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1244 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	06/28/2013 254 KV
Electrical Conductivity	1880	µmhos/cm		5	SM 2510B	06/28/2013 254 KV
Total Dissolved Solids (180)	1200	mg/L		10	SM 2540	06/28/2013 1320 JCG
<b>Data Quality</b>						
Cation Sum	21.80	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Anion Sum	19.79	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Cation-Anion Balance (± 5%)	4.83	%		0.01	SM 1030E	07/08/2013 1607 SL
Solids, Total Dissolved (Calc)	1220	mg/L		10	SM 1030E	07/08/2013 1607 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

Page 4 of 12



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-002  
**ClientSample ID:** 5367-34-06SM  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 9:40:00 AM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/28/2013 2022 BK
Arsenic	0.011	mg/L		0.005	EPA 200.8	06/27/2013 1624 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1624 MS
Boron	0.4	mg/L		0.1	EPA 200.7	06/28/2013 2022 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1624 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 2022 BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1624 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 2022 BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1624 MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/02/2013 1110 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1624 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 2022 BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/27/2013 1624 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1624 MS
Uranium	0.0027	mg/L		0.0003	EPA 200.8	06/27/2013 1624 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1624 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 2022 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1322 MS
<b>Metals - Total</b>						
Iron	0.69	mg/L		0.05	EPA 200.7	06/29/2013 102 BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/29/2013 102 BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-002  
**ClientSample ID:** 5367-34-06SM  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 9:40:00 AM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.4	pCi/L		4	SM 7110B	07/24/2013 1709	SH
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	07/24/2013 1709	SH
Gross Beta	12.7	pCi/L		8	SM 7110B	07/24/2013 1709	SH
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	07/24/2013 1709	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/11/2013 1005	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/31/2013 1148	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/31/2013 1148	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2013 609	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2013 609	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 1500	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 1500	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/24/2013  
**Report ID:** S1306230001

**ProjectName:** Kendrick  
**Lab ID:** S1306230-001  
**ClientSample ID:** 5367-34-06SA  
**COC:** 150404

**WorkOrder:** S1306230  
**CollectionDate:** 6/13/2013 10:30:00 AM  
**DateReceived:** 6/13/2013 4:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.55	s.u.			Field	06/12/2013 1030
Conductivity	2260	µmhos/cm			Field	06/12/2013 1030
Dissolved Oxygen	1.62	mg/L			Field	06/12/2013 1030
Dissolved Oxygen (pct)	16.1	%			Field	06/12/2013 1030
Turbidity	3.78	NTU			Field	06/12/2013 1030
Temperature	14.4	°C			Field	06/12/2013 1030
Oxygen Reduction Potential (ORP)	+43	mV			Field	06/12/2013 1030
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	667	mg/L		5	SM 2320B	06/14/2013 1312 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	796	mg/L		5	SM 2320B	06/14/2013 1312 KV
Alkalinity, Carbonate as CO <sub>3</sub>	9	mg/L		5	SM 2320B	06/14/2013 1312 KV
Chloride	7	mg/L		1	EPA 300.0	06/15/2013 121 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	06/14/2013 1312 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/17/2013 1254 RH
Sulfate	390	mg/L		1	EPA 300.0	06/15/2013 121 AMB
Calcium	14	mg/L		1	EPA 200.7	06/17/2013 1945 DG
Magnesium	8	mg/L		1	EPA 200.7	06/17/2013 1945 DG
Potassium	9	mg/L		1	EPA 200.7	06/17/2013 1945 DG
Sodium	489	mg/L		1	EPA 200.7	06/17/2013 1945 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/19/2013 936 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	06/14/2013 1312 KV
Electrical Conductivity	2030	µmhos/cm		5	SM 2510B	06/14/2013 1312 KV
Total Dissolved Solids (180)	1390	mg/L		10	SM 2540	06/14/2013 1713 JCG
<b>Data Quality</b>						
Cation Sum	22.84	meq/L		0.01	SM 1030E	06/19/2013 1520 LJK
Anion Sum	21.68	meq/L		0.01	SM 1030E	06/19/2013 1520 LJK
Cation-Anion Balance (± 5%)	2.60	%		0.01	SM 1030E	06/19/2013 1520 LJK
Solids, Total Dissolved (Calc)	1320	mg/L		10	SM 1030E	06/19/2013 1520 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 6

**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/24/2013  
**Report ID:** S1306230001

**ProjectName:** Kendrick  
**Lab ID:** S1306230-001  
**ClientSample ID:** 5367-34-06SA  
**COC:** 150404

**WorkOrder:** S1306230  
**CollectionDate:** 6/13/2013 10:30:00 AM  
**DateReceived:** 6/13/2013 4:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/17/2013 1945 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/14/2013 1257 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/14/2013 1257 MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/17/2013 1945 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/14/2013 1257 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/17/2013 1945 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/14/2013 1257 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/17/2013 1945 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/14/2013 1257 MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/19/2013 1237 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/14/2013 1257 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/17/2013 1945 DG
Selenium	0.009	mg/L		0.005	EPA 200.8	06/14/2013 1257 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/14/2013 1257 MS
Uranium	0.0014	mg/L		0.0003	EPA 200.8	06/14/2013 1257 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/14/2013 1257 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/17/2013 1945 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/08/2013 1729 MS
<b>Metals - Total</b>						
Iron	0.13	mg/L		0.05	EPA 200.7	06/19/2013 1055 DG
Manganese	0.10	mg/L		0.02	EPA 200.7	06/19/2013 1055 DG

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/24/2013  
**Report ID:** S1306230001

**ProjectName:** Kendrick  
**Lab ID:** S1306230-001  
**ClientSample ID:** 5367-34-06SA  
**COC:** 150404

**WorkOrder:** S1306230  
**CollectionDate:** 6/13/2013 10:30:00 AM  
**DateReceived:** 6/13/2013 4:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		4	SM 7110B	07/02/2013 1654 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/02/2013 1654 SH
Gross Beta	ND	pCi/L		8	SM 7110B	07/02/2013 1654 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/02/2013 1654 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/05/2013 940 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/05/2013 940 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/07/2013 547 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/07/2013 547 WN
Thorium 230	ND	pCi/L		0.2	ACW10	06/25/2013 811 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	06/25/2013 811 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	06/25/2013 1359 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	06/25/2013 1359 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/01/2013 805 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/01/2013 805 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-001  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 9:30:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.51	s.u.			Field	06/27/2013 930
Conductivity	3030	µmhos/cm			Field	06/27/2013 930
Dissolved Oxygen	2.33	mg/L			Field	06/27/2013 930
Dissolved Oxygen (pct)	22.6	%			Field	06/27/2013 930
Turbidity	0.08	NTU			Field	06/27/2013 930
Temperature	13.7	°C			Field	06/27/2013 930
Oxygen Reduction Potential (ORP)	+5	mV			Field	06/27/2013 930
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	474	mg/L		5	SM 2320B	07/01/2013 2030 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	506	mg/L		5	SM 2320B	07/01/2013 2030 KV
Alkalinity, Carbonate as CO <sub>3</sub>	36	mg/L		5	SM 2320B	07/01/2013 2030 KV
Chloride	9	mg/L		1	EPA 300.0	07/01/2013 2215 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	07/01/2013 2030 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1224 RH
Sulfate	814	mg/L		1	EPA 300.0	07/01/2013 2215 AMB
Calcium	3	mg/L		1	EPA 200.7	07/01/2013 1908 DG
Magnesium	2	mg/L		1	EPA 200.7	07/01/2013 1908 DG
Potassium	12	mg/L		1	EPA 200.7	07/01/2013 1908 DG
Sodium	590	mg/L		1	EPA 200.7	07/01/2013 1908 DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	07/05/2013 1329 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	07/01/2013 2030 KV
Electrical Conductivity	2950	µmhos/cm		5	SM 2510B	07/01/2013 2030 KV
Total Dissolved Solids (180)	1890	mg/L		10	SM 2540	07/01/2013 1105 JCG
<b>Data Quality</b>						
Cation Sum	26.33	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Anion Sum	26.71	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Cation-Anion Balance (± 5%)	0.71	%		0.01	SM 1030E	07/08/2013 1437 LJK
Solids, Total Dissolved (Calc)	1720	mg/L		10	SM 1030E	07/08/2013 1437 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-001  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 9:30:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	07/01/2013 1908 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/29/2013 126 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/29/2013 126 MS
Boron	0.5	mg/L		0.1	EPA 200.7	07/01/2013 1908 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/29/2013 126 MS
Chromium	ND	mg/L		0.01	EPA 200.7	07/01/2013 1908 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/29/2013 126 MS
Iron	ND	mg/L		0.05	EPA 200.7	07/01/2013 1908 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/29/2013 126 MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2013 1109 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/29/2013 126 MS
Nickel	ND	mg/L		0.01	EPA 200.7	07/01/2013 1908 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/29/2013 126 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/29/2013 126 MS
Uranium	0.0231	mg/L		0.0003	EPA 200.8	06/29/2013 126 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/29/2013 126 MS
Zinc	ND	mg/L		0.01	EPA 200.7	07/01/2013 1908 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/18/2013 1835 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	07/03/2013 1801 BK
Manganese	ND	mg/L		0.02	EPA 200.7	07/03/2013 1801 BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-001  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 9:30:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	50.9	pCi/L		4	SM 7110B	08/09/2013 1841 SH
Gross Alpha Precision (±)	5.7	pCi/L			SM 7110B	08/09/2013 1841 SH
Gross Beta	17.5	pCi/L		7	SM 7110B	08/09/2013 1841 SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	08/09/2013 1841 SH
Radium 226	0.8	pCi/L		0.2	SM 7500 Ra-B	07/22/2013 1440 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/22/2013 1440 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/04/2013 452 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/04/2013 452 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/23/2013 1157 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/23/2013 1157 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1551 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1551 SH
Thorium 230	ND	pCi/L		0.2	ACW10	08/06/2013 1207 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	08/06/2013 1207 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-002  
**ClientSample ID:** 5368-43-12SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 9:45:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.57	s.u.			Field	06/27/2013 945
Conductivity	1808	µmhos/cm			Field	06/27/2013 945
Dissolved Oxygen	1.67	mg/L			Field	06/27/2013 945
Dissolved Oxygen (pct)	15.9	%			Field	06/27/2013 945
Turbidity	1.81	NTU			Field	06/27/2013 945
Temperature	13.2	°C			Field	06/27/2013 945
Oxygen Reduction Potential (ORP)	-68	mV			Field	06/27/2013 945
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	523	mg/L		5	SM 2320B	07/01/2013 2039 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	539	mg/L		5	SM 2320B	07/01/2013 2039 KV
Alkalinity, Carbonate as CO <sub>3</sub>	49	mg/L		5	SM 2320B	07/01/2013 2039 KV
Chloride	4	mg/L		1	EPA 300.0	07/01/2013 2228 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	07/01/2013 2039 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1225 RH
Sulfate	331	mg/L		1	EPA 300.0	07/01/2013 2228 AMB
Calcium	2	mg/L		1	EPA 200.7	07/01/2013 1910 DG
Magnesium	ND	mg/L		1	EPA 200.7	07/01/2013 1910 DG
Potassium	18	mg/L		1	EPA 200.7	07/01/2013 1910 DG
Sodium	393	mg/L		1	EPA 200.7	07/01/2013 1910 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1330 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	07/01/2013 2039 KV
Electrical Conductivity	1900	µmhos/cm		5	SM 2510B	07/01/2013 2039 KV
Total Dissolved Solids (180)	1140	mg/L		10	SM 2540	07/01/2013 1106 JCG
<b>Data Quality</b>						
Cation Sum	17.68	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Anion Sum	17.50	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Cation-Anion Balance (± 5%)	0.52	%		0.01	SM 1030E	07/08/2013 1437 LJK
Solids, Total Dissolved (Calc)	1060	mg/L		10	SM 1030E	07/08/2013 1437 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-002  
**ClientSample ID:** 5368-43-12SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 9:45:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	07/01/2013 1910	DG
Arsenic	0.008	mg/L		0.005	EPA 200.8	06/29/2013 131	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/29/2013 131	MS
Boron	0.5	mg/L		0.1	EPA 200.7	07/01/2013 1910	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/29/2013 131	MS
Chromium	ND	mg/L		0.01	EPA 200.7	07/01/2013 1910	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/29/2013 131	MS
Iron	ND	mg/L		0.05	EPA 200.7	07/01/2013 1910	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/29/2013 131	MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2013 1111	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/29/2013 131	MS
Nickel	ND	mg/L		0.01	EPA 200.7	07/01/2013 1910	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/29/2013 131	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/29/2013 131	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/29/2013 131	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/29/2013 131	MS
Zinc	ND	mg/L		0.01	EPA 200.7	07/01/2013 1910	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/18/2013 1859	MS
<b>Metals - Total</b>							
Iron	0.09	mg/L		0.05	EPA 200.7	07/03/2013 1806	BK
Manganese	ND	mg/L		0.02	EPA 200.7	07/03/2013 1806	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-002  
**ClientSample ID:** 5368-43-12SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 9:45:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		3	SM 7110B	08/09/2013 1841 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	08/09/2013 1841 SH
Gross Beta	10.6	pCi/L		6	SM 7110B	08/09/2013 1841 SH
Gross Beta Precision (±)	3.7	pCi/L			SM 7110B	08/09/2013 1841 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/22/2013 1440 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/22/2013 1440 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/04/2013 753 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/04/2013 753 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/23/2013 1157 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/23/2013 1157 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1551 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1551 SH
Thorium 230	ND	pCi/L		0.2	ACW10	08/06/2013 1207 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	08/06/2013 1207 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-005  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/28/2013 9:45:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.69	s.u.			Field	06/28/2013 945
Conductivity	1604	µmhos/cm			Field	06/28/2013 945
Dissolved Oxygen	2.83	mg/L			Field	06/28/2013 945
Dissolved Oxygen (pct)	27.9	%			Field	06/28/2013 945
Turbidity	2.73	NTU			Field	06/28/2013 945
Temperature	13.9	°C			Field	06/28/2013 945
Oxygen Reduction Potential (ORP)	+105	mV			Field	06/28/2013 945
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	484	mg/L		5	SM 2320B	07/01/2013 2107 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	479	mg/L		5	SM 2320B	07/01/2013 2107 KV
Alkalinity, Carbonate as CO <sub>3</sub>	55	mg/L		5	SM 2320B	07/01/2013 2107 KV
Chloride	5	mg/L		1	EPA 300.0	07/01/2013 2305 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	07/01/2013 2107 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1228 RH
Sulfate	241	mg/L		1	EPA 300.0	07/01/2013 2305 AMB
Calcium	2	mg/L		1	EPA 200.7	07/01/2013 1917 DG
Magnesium	ND	mg/L		1	EPA 200.7	07/01/2013 1917 DG
Potassium	7	mg/L		1	EPA 200.7	07/01/2013 1917 DG
Sodium	342	mg/L		1	EPA 200.7	07/01/2013 1917 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1333 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	07/01/2013 2107 KV
Electrical Conductivity	1670	µmhos/cm		5	SM 2510B	07/01/2013 2107 KV
Total Dissolved Solids (180)	960	mg/L		10	SM 2540	07/01/2013 1110 JCG
<b>Data Quality</b>						
Cation Sum	15.14	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Anion Sum	14.91	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Cation-Anion Balance (± 5%)	0.79	%		0.01	SM 1030E	07/08/2013 1437 LJK
Solids, Total Dissolved (Calc)	890	mg/L		10	SM 1030E	07/08/2013 1437 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-005  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/28/2013 9:45:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	07/01/2013 1917	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/29/2013 157	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/29/2013 157	MS
Boron	0.4	mg/L		0.1	EPA 200.7	07/01/2013 1917	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/29/2013 157	MS
Chromium	ND	mg/L		0.01	EPA 200.7	07/01/2013 1917	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/29/2013 157	MS
Iron	ND	mg/L		0.05	EPA 200.7	07/01/2013 1917	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/29/2013 157	MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2013 1117	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/29/2013 157	MS
Nickel	ND	mg/L		0.01	EPA 200.7	07/01/2013 1917	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/29/2013 157	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/29/2013 157	MS
Uranium	0.0172	mg/L		0.0003	EPA 200.8	06/29/2013 157	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/29/2013 157	MS
Zinc	ND	mg/L		0.01	EPA 200.7	07/01/2013 1917	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/18/2013 1932	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	07/03/2013 1824	BK
Manganese	ND	mg/L		0.02	EPA 200.7	07/03/2013 1824	BK

These results apply only to the samples tested.

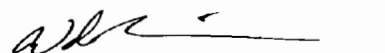
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-005  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/28/2013 9:45:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	34.9	pCi/L		3	SM 7110B	08/09/2013 1841	SH
Gross Alpha Precision (±)	3.7	pCi/L			SM 7110B	08/09/2013 1841	SH
Gross Beta	10.0	pCi/L		4	SM 7110B	08/09/2013 1841	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	08/09/2013 1841	SH
Radium 226	1.0	pCi/L		0.2	SM 7500 Ra-B	07/22/2013 1440	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/22/2013 1440	SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/04/2013 1656	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/04/2013 1656	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/24/2013 1610	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/24/2013 1610	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1758	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1758	SH
Thorium 230	ND	pCi/L		0.2	ACW10	08/08/2013 1615	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	08/08/2013 1615	MB

## These results apply only to the samples tested.

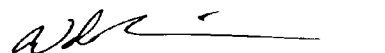
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-006  
**ClientSample ID:** 5368-33-14SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/28/2013 10:30:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.95	s.u.			Field	06/28/2013 1030
Conductivity	1475	µmhos/cm			Field	06/28/2013 1030
Dissolved Oxygen	1.91	mg/L			Field	06/28/2013 1030
Dissolved Oxygen (pct)	18.5	%			Field	06/28/2013 1030
Turbidity	8.83	NTU			Field	06/28/2013 1030
Temperature	14.0	°C			Field	06/28/2013 1030
Oxygen Reduction Potential (ORP)	+66	mV			Field	06/28/2013 1030
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	522	mg/L		5	SM 2320B	07/01/2013 2116 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	457	mg/L		5	SM 2320B	07/01/2013 2116 KV
Alkalinity, Carbonate as CO <sub>3</sub>	88	mg/L		5	SM 2320B	07/01/2013 2116 KV
Chloride	2	mg/L		1	EPA 300.0	07/01/2013 2318 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	07/01/2013 2116 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1229 RH
Sulfate	168	mg/L		1	EPA 300.0	07/01/2013 2318 AMB
Calcium	1	mg/L		1	EPA 200.7	07/01/2013 1920 DG
Magnesium	ND	mg/L		1	EPA 200.7	07/01/2013 1920 DG
Potassium	24	mg/L		1	EPA 200.7	07/01/2013 1920 DG
Sodium	283	mg/L		1	EPA 200.7	07/01/2013 1920 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	07/05/2013 1334 RH
<b>General Parameters</b>						
pH	9.5	s.u.		0.1	SM 4500 H B	07/01/2013 2116 KV
Electrical Conductivity	1510	µmhos/cm		5	SM 2510B	07/01/2013 2116 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	07/01/2013 1111 JCG
<b>Data Quality</b>						
Cation Sum	12.98	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Anion Sum	14.06	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Cation-Anion Balance (± 5%)	4.01	%		0.01	SM 1030E	07/08/2013 1437 LJK
Solids, Total Dissolved (Calc)	790	mg/L		10	SM 1030E	07/08/2013 1437 LJK

These results apply only to the samples tested.

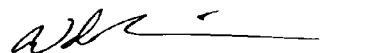
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-006  
**ClientSample ID:** 5368-33-14SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/28/2013 10:30:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	07/01/2013 1920 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/29/2013 202 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/29/2013 202 MS
Boron	0.4	mg/L		0.1	EPA 200.7	07/01/2013 1920 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/29/2013 202 MS
Chromium	ND	mg/L		0.01	EPA 200.7	07/01/2013 1920 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/29/2013 202 MS
Iron	ND	mg/L		0.05	EPA 200.7	07/01/2013 1920 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/29/2013 202 MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2013 1123 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/29/2013 202 MS
Nickel	ND	mg/L		0.01	EPA 200.7	07/01/2013 1920 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/29/2013 202 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/29/2013 202 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/29/2013 202 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/29/2013 202 MS
Zinc	ND	mg/L		0.01	EPA 200.7	07/01/2013 1920 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/18/2013 1939 MS
<b>Metals - Total</b>						
Iron	0.18	mg/L		0.05	EPA 200.7	07/03/2013 1826 BK
Manganese	ND	mg/L		0.02	EPA 200.7	07/03/2013 1826 BK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-006  
**ClientSample ID:** 5368-33-14SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/28/2013 10:30:00 AM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	08/09/2013 1841 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	08/09/2013 1841 SH
Gross Beta	16.4	pCi/L		4	SM 7110B	08/09/2013 1841 SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	08/09/2013 1841 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/22/2013 1440 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/22/2013 1440 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/04/2013 1957 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/04/2013 1957 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/24/2013 1610 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/24/2013 1610 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1758 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1758 SH
Thorium 230	ND	pCi/L		0.2	ACW10	08/08/2013 1615 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	08/08/2013 1615 MB

## These results apply only to the samples tested.

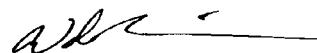
**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-002  
**ClientSample ID:** 5368-33-14SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 2:40:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.03	s.u.			Field	06/18/2013 1440
Conductivity	839	µmhos/cm			Field	06/18/2013 1440
Dissolved Oxygen	1.36	mg/L			Field	06/18/2013 1440
Dissolved Oxygen (pct)	15.4	%			Field	06/18/2013 1440
Turbidity	6.77	NTU			Field	06/18/2013 1440
Temperature	19.6	°C			Field	06/18/2013 1440
Oxygen Reduction Potential (ORP)	+25	mV			Field	06/18/2013 1440
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	401	mg/L		5	SM 2320B	06/21/2013 2104 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	473	mg/L		5	SM 2320B	06/21/2013 2104 KV
Alkalinity, Carbonate as CO <sub>3</sub>	8	mg/L		5	SM 2320B	06/21/2013 2104 KV
Chloride	1	mg/L		1	EPA 300.0	06/22/2013 316 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	06/21/2013 2104 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/21/2013 1405 RH
Sulfate	55	mg/L		1	EPA 300.0	06/22/2013 316 AMB
Calcium	27	mg/L		1	EPA 200.7	06/21/2013 2123 DG
Magnesium	20	mg/L		1	EPA 200.7	06/21/2013 2123 DG
Potassium	11	mg/L		1	EPA 200.7	06/21/2013 2123 DG
Sodium	145	mg/L		1	EPA 200.7	06/21/2013 2123 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1524 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	06/21/2013 2104 KV
Electrical Conductivity	902	µmhos/cm		5	SM 2510B	06/21/2013 2104 KV
Total Dissolved Solids (180)	510	mg/L		10	SM 2540	06/20/2013 1202 JCG
<b>Data Quality</b>						
Cation Sum	9.52	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	9.20	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	1.70	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	500	mg/L		10	SM 1030E	06/27/2013 1437 LJK

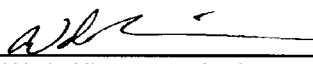
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-002  
**ClientSample ID:** 5368-33-14SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 2:40:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/21/2013 2123	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/20/2013 2056	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2056	MS
Boron	ND	mg/L		0.1	EPA 200.7	06/21/2013 2123	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2056	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2123	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2056	MS
Iron	0.18	mg/L		0.05	EPA 200.7	06/21/2013 2123	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2056	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1215	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2056	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2123	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/20/2013 2056	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2056	MS
Uranium	0.0108	mg/L		0.0003	EPA 200.8	06/20/2013 2056	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2056	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2123	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 1958	MS
<b>Metals - Total</b>							
Iron	0.54	mg/L		0.05	EPA 200.7	06/24/2013 1644	BK
Manganese	0.13	mg/L		0.02	EPA 200.7	06/24/2013 1644	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-002  
**ClientSample ID:** 5368-33-14SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 2:40:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	7.1	pCi/L		2	SM 7110B	07/15/2013 2317	SH
Gross Alpha Precision (±)	1.9	pCi/L			SM 7110B	07/15/2013 2317	SH
Gross Beta	7.3	pCi/L		3	SM 7110B	07/15/2013 2317	SH
Gross Beta Precision (±)	2.5	pCi/L			SM 7110B	07/15/2013 2317	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/03/2013 1336	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/18/2013 2055	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/18/2013 2055	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/02/2013 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/02/2013 813	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1024	SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/15/2013 1024	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 1319	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 1319	MB

## These results apply only to the samples tested.

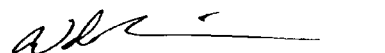
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-004  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 3:10:00 PM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.37	s.u.			Field	06/27/2013 1510
Conductivity	1557	µmhos/cm			Field	06/27/2013 1510
Dissolved Oxygen	1.52	mg/L			Field	06/27/2013 1510
Dissolved Oxygen (pct)	15.9	%			Field	06/27/2013 1510
Turbidity	57.9	NTU			Field	06/27/2013 1510
Temperature	16.0	°C			Field	06/27/2013 1510
Oxygen Reduction Potential (ORP)	+10	mV			Field	06/27/2013 1510
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	496	mg/L		5	SM 2320B	07/01/2013 2058 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	526	mg/L		5	SM 2320B	07/01/2013 2058 KV
Alkalinity, Carbonate as CO <sub>3</sub>	39	mg/L		5	SM 2320B	07/01/2013 2058 KV
Chloride	3	mg/L		1	EPA 300.0	07/01/2013 2253 AMB
Fluoride	1.8	mg/L		0.1	SM 4500FC	07/01/2013 2058 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1227 RH
Sulfate	230	mg/L		1	EPA 300.0	07/01/2013 2253 AMB
Calcium	3	mg/L		1	EPA 200.7	07/01/2013 1915 DG
Magnesium	ND	mg/L		1	EPA 200.7	07/01/2013 1915 DG
Potassium	4	mg/L		1	EPA 200.7	07/01/2013 1915 DG
Sodium	344	mg/L		1	EPA 200.7	07/01/2013 1915 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1332 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	07/01/2013 2058 KV
Electrical Conductivity	1620	µmhos/cm		5	SM 2510B	07/01/2013 2058 KV
Total Dissolved Solids (180)	960	mg/L		10	SM 2540	07/01/2013 1108 JCG
<b>Data Quality</b>						
Cation Sum	15.21	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Anion Sum	14.88	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Cation-Anion Balance (± 5%)	1.09	%		0.01	SM 1030E	07/08/2013 1437 LJK
Solids, Total Dissolved (Calc)	880	mg/L		10	SM 1030E	07/08/2013 1437 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-004  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 3:10:00 PM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	07/01/2013 1915	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/29/2013 142	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/29/2013 142	MS
Boron	0.4	mg/L		0.1	EPA 200.7	07/01/2013 1915	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/29/2013 142	MS
Chromium	ND	mg/L		0.01	EPA 200.7	07/01/2013 1915	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/29/2013 142	MS
Iron	ND	mg/L		0.05	EPA 200.7	07/01/2013 1915	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/29/2013 142	MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2013 1115	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/29/2013 142	MS
Nickel	ND	mg/L		0.01	EPA 200.7	07/01/2013 1915	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/29/2013 142	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/29/2013 142	MS
Uranium	0.0060	mg/L		0.0003	EPA 200.8	06/29/2013 142	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/29/2013 142	MS
Zinc	ND	mg/L		0.01	EPA 200.7	07/01/2013 1915	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/18/2013 1925	MS
<b>Metals - Total</b>							
Iron	2.06	mg/L		0.05	EPA 200.7	07/03/2013 1822	BK
Manganese	0.03	mg/L		0.02	EPA 200.7	07/03/2013 1822	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-004  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 3:10:00 PM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	12.0	pCi/L		2	SM 7110B	08/09/2013 1841 SH
Gross Alpha Precision (±)	2.3	pCi/L			SM 7110B	08/09/2013 1841 SH
Gross Beta	5.1	pCi/L		4	SM 7110B	08/09/2013 1841 SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	08/09/2013 1841 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/22/2013 1440 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/22/2013 1440 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/04/2013 1355 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/04/2013 1355 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/24/2013 803 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/24/2013 803 MB
<b>Radionuclides - Suspended</b>						
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1758 SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/25/2013 1758 SH
Thorium 230	ND	pCi/L		0.2	ACW10	08/08/2013 1615 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	08/08/2013 1615 MB

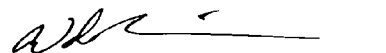
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-003  
**ClientSample ID:** 5368-41-23SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 1:40:00 PM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.27	s.u.			Field	06/27/2013 1340
Conductivity	1525	µmhos/cm			Field	06/27/2013 1340
Dissolved Oxygen	1.19	mg/L			Field	06/27/2013 1340
Dissolved Oxygen (pct)	11.7	%			Field	06/27/2013 1340
Turbidity	7.24	NTU			Field	06/27/2013 1340
Temperature	14.9	°C			Field	06/27/2013 1340
Oxygen Reduction Potential (ORP)	-42	mV			Field	06/27/2013 1340
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	527	mg/L		5	SM 2320B	07/01/2013 2048 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	573	mg/L		5	SM 2320B	07/01/2013 2048 KV
Alkalinity, Carbonate as CO <sub>3</sub>	35	mg/L		5	SM 2320B	07/01/2013 2048 KV
Chloride	3	mg/L		1	EPA 300.0	07/01/2013 2240 AMB
Fluoride	1.8	mg/L		0.1	SM 4500FC	07/01/2013 2048 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1226 RH
Sulfate	212	mg/L		1	EPA 300.0	07/01/2013 2240 AMB
Calcium	2	mg/L		1	EPA 200.7	07/01/2013 1913 DG
Magnesium	ND	mg/L		1	EPA 200.7	07/01/2013 1913 DG
Potassium	5	mg/L		1	EPA 200.7	07/01/2013 1913 DG
Sodium	333	mg/L		1	EPA 200.7	07/01/2013 1913 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1331 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	07/01/2013 2048 KV
Electrical Conductivity	1600	µmhos/cm		5	SM 2510B	07/01/2013 2048 KV
Total Dissolved Solids (180)	960	mg/L		10	SM 2540	07/01/2013 1107 JCG
<b>Data Quality</b>						
Cation Sum	14.74	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Anion Sum	15.13	meq/L		0.01	SM 1030E	07/08/2013 1437 LJK
Cation-Anion Balance (± 5%)	1.30	%		0.01	SM 1030E	07/08/2013 1437 LJK
Solids, Total Dissolved (Calc)	870	mg/L		10	SM 1030E	07/08/2013 1437 LJK

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-003  
**ClientSample ID:** 5368-41-23SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 1:40:00 PM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	07/01/2013 1913	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	06/29/2013 136	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/29/2013 136	MS
Boron	0.5	mg/L		0.1	EPA 200.7	07/01/2013 1913	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/29/2013 136	MS
Chromium	ND	mg/L		0.01	EPA 200.7	07/01/2013 1913	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/29/2013 136	MS
Iron	ND	mg/L		0.05	EPA 200.7	07/01/2013 1913	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/29/2013 136	MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2013 1113	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/29/2013 136	MS
Nickel	ND	mg/L		0.01	EPA 200.7	07/01/2013 1913	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/29/2013 136	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/29/2013 136	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/29/2013 136	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/29/2013 136	MS
Zinc	ND	mg/L		0.01	EPA 200.7	07/01/2013 1913	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/18/2013 1919	MS
<b>Metals - Total</b>							
Iron	0.35	mg/L		0.05	EPA 200.7	07/03/2013 1819	BK
Manganese	ND	mg/L		0.02	EPA 200.7	07/03/2013 1819	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/21/2013  
**Report ID:** S1306495001

**ProjectName:** Kendrick  
**Lab ID:** S1306495-003  
**ClientSample ID:** 5368-41-23SM  
**COC:** 150166

**WorkOrder:** S1306495  
**CollectionDate:** 6/27/2013 1:40:00 PM  
**DateReceived:** 6/28/2013 2:18:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	08/09/2013 1841 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	08/09/2013 1841 SH
Gross Beta	ND	pCi/L		4	SM 7110B	08/09/2013 1841 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	08/09/2013 1841 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/22/2013 1440 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/22/2013 1440 SH
Radium 228	2.1	pCi/L		1	Ga-Tech	08/04/2013 1054 MK
Radium 228 Precision (±)	1.0	pCi/L			Ga-Tech	08/04/2013 1054 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/24/2013 803 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/24/2013 803 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1758 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1758 SH
Thorium 230	ND	pCi/L		0.2	ACW10	08/06/2013 1207 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	08/06/2013 1207 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-001  
**ClientSample ID:** 5368-41-23SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 1:30:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.54	s.u.			Field	06/18/2013 1330
Conductivity	1191	µmhos/cm			Field	06/18/2013 1330
Dissolved Oxygen	1.83	mg/L			Field	06/18/2013 1330
Dissolved Oxygen (pct)	20.4	%			Field	06/18/2013 1330
Turbidity	18.86	NTU			Field	06/18/2013 1330
Temperature	19.3	°C			Field	06/18/2013 1330
Oxygen Reduction Potential (ORP)	-17	mV			Field	06/18/2013 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	540	mg/L		5	SM 2320B	06/21/2013 2053 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	659	mg/L		5	SM 2320B	06/21/2013 2053 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	06/21/2013 2053 KV
Chloride	3	mg/L		1	EPA 300.0	06/22/2013 303 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	06/21/2013 2053 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/21/2013 1404 RH
Sulfate	175	mg/L		1	EPA 300.0	06/22/2013 303 AMB
Calcium	120	mg/L		1	EPA 200.7	06/21/2013 2121 DG
Magnesium	59	mg/L		1	EPA 200.7	06/21/2013 2121 DG
Potassium	26	mg/L		1	EPA 200.7	06/21/2013 2121 DG
Sodium	68	mg/L		1	EPA 200.7	06/21/2013 2121 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1523 RH
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	06/21/2013 2053 KV
Electrical Conductivity	1350	µmhos/cm		5	SM 2510B	06/21/2013 2053 KV
Total Dissolved Solids (180)	760	mg/L		10	SM 2540	06/20/2013 1201 JCG
<b>Data Quality</b>						
Cation Sum	14.48	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	14.51	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	0.09	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	770	mg/L		10	SM 1030E	06/27/2013 1437 LJK

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-001  
**ClientSample ID:** 5368-41-23SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 1:30:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/21/2013 2121	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/20/2013 2051	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2051	MS
Boron	ND	mg/L		0.1	EPA 200.7	06/21/2013 2121	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2051	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2121	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2051	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/21/2013 2121	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2051	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1207	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2051	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2121	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/20/2013 2051	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2051	MS
Uranium	0.0534	mg/L		0.0003	EPA 200.8	06/20/2013 2051	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2051	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2121	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 1953	MS
<b>Metals - Total</b>							
Iron	0.57	mg/L		0.05	EPA 200.7	06/24/2013 1639	BK
Manganese	0.06	mg/L		0.02	EPA 200.7	06/24/2013 1639	BK

## These results apply only to the samples tested.

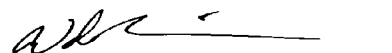
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-001  
**ClientSample ID:** 5368-41-23SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 1:30:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	44.0	pCi/L		2	SM 7110B	07/15/2013 2317	SH
Gross Alpha Precision (±)	4.0	pCi/L			SM 7110B	07/15/2013 2317	SH
Gross Beta	33.2	pCi/L		3	SM 7110B	07/15/2013 2317	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	07/15/2013 2317	SH
Radium 226	0.8	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/03/2013 1336	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/18/2013 1754	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/18/2013 1754	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/02/2013 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/02/2013 813	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1024	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1024	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 845	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 845	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-004  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 2:30:00 PM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.48	s.u.			Field	06/26/2013 1430
Conductivity	1907	µmhos/cm			Field	06/26/2013 1430
Dissolved Oxygen	1.40	mg/L			Field	06/26/2013 1430
Dissolved Oxygen (pct)	14.3	%			Field	06/26/2013 1430
Turbidity	0.35	NTU			Field	06/26/2013 1430
Temperature	14.9	°C			Field	06/26/2013 1430
Oxygen Reduction Potential (ORP)	+17	mV			Field	06/26/2013 1430
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	543	mg/L		5	SM 2320B	06/28/2013 331 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	558	mg/L		5	SM 2320B	06/28/2013 331 KV
Alkalinity, Carbonate as CO <sub>3</sub>	51	mg/L		5	SM 2320B	06/28/2013 331 KV
Chloride	8	mg/L		1	EPA 300.0	07/03/2013 1647 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	06/28/2013 331 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1153 RH
Sulfate	395	mg/L		1	EPA 300.0	06/28/2013 1411 AMB
Calcium	2	mg/L		1	EPA 200.7	07/03/2013 1423 BK
Magnesium	ND	mg/L		1	EPA 200.7	07/03/2013 1423 BK
Potassium	6	mg/L		1	EPA 200.7	07/03/2013 1423 BK
Sodium	443	mg/L		1	EPA 200.7	07/03/2013 1423 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1246 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	06/28/2013 331 KV
Electrical Conductivity	1910	µmhos/cm		5	SM 2510B	06/28/2013 331 KV
Total Dissolved Solids (180)	1220	mg/L		10	SM 2540	06/28/2013 1323 JCG
<b>Data Quality</b>						
Cation Sum	19.53	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Anion Sum	19.37	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Cation-Anion Balance (± 5%)	0.40	%		0.01	SM 1030E	07/08/2013 1607 SL
Solids, Total Dissolved (Calc)	1180	mg/L		10	SM 1030E	07/08/2013 1607 SL

## These results apply only to the samples tested.

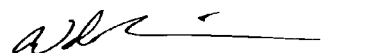
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-004  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 2:30:00 PM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/28/2013 2027	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/27/2013 1700	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1700	MS
Boron	0.6	mg/L		0.1	EPA 200.7	06/28/2013 2027	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1700	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 2027	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1700	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 2027	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1700	MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/02/2013 1114	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1700	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 2027	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/27/2013 1700	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1700	MS
Uranium	0.0097	mg/L		0.0003	EPA 200.8	06/27/2013 1700	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1700	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 2027	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1347	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	06/29/2013 106	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/29/2013 106	BK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-004  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 2:30:00 PM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	19.6	pCi/L		5	SM 7110B	07/24/2013 1709	SH
Gross Alpha Precision (±)	4.2	pCi/L			SM 7110B	07/24/2013 1709	SH
Gross Beta	8.7	pCi/L		8	SM 7110B	07/24/2013 1709	SH
Gross Beta Precision (±)	4.8	pCi/L			SM 7110B	07/24/2013 1709	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	07/18/2013 1442	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/18/2013 1442	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/31/2013 1750	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/31/2013 1750	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2013 609	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2013 609	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1344	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1344	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/18/2013 738	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/18/2013 738	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-003  
**ClientSample ID:** 5368-24-12SM  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 1:30:00 PM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.41	s.u.			Field	06/26/2013 1330
Conductivity	1459	µmhos/cm			Field	06/26/2013 1330
Dissolved Oxygen	1.30	mg/L			Field	06/26/2013 1330
Dissolved Oxygen (pct)	13.2	%			Field	06/26/2013 1330
Turbidity	29.3	NTU			Field	06/26/2013 1330
Temperature	14.2	°C			Field	06/26/2013 1330
Oxygen Reduction Potential (ORP)	-43	mV			Field	06/26/2013 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	554	mg/L		5	SM 2320B	06/28/2013 306 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	571	mg/L		5	SM 2320B	06/28/2013 306 KV
Alkalinity, Carbonate as CO <sub>3</sub>	52	mg/L		5	SM 2320B	06/28/2013 306 KV
Chloride	3	mg/L		1	EPA 300.0	06/28/2013 1359 AMB
Fluoride	2.4	mg/L		0.1	SM 4500FC	06/28/2013 306 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1152 RH
Sulfate	177	mg/L		1	EPA 300.0	06/28/2013 1359 AMB
Calcium	3	mg/L		1	EPA 200.7	06/28/2013 2024 BK
Magnesium	ND	mg/L		1	EPA 200.7	06/28/2013 2024 BK
Potassium	4	mg/L		1	EPA 200.7	06/28/2013 2024 BK
Sodium	359	mg/L		1	EPA 200.7	06/28/2013 2024 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	07/05/2013 1245 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	06/28/2013 306 KV
Electrical Conductivity	1420	µmhos/cm		5	SM 2510B	06/28/2013 306 KV
Total Dissolved Solids (180)	890	mg/L		10	SM 2540	06/28/2013 1322 JCG
<b>Data Quality</b>						
Cation Sum	15.86	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Anion Sum	14.98	meq/L		0.01	SM 1030E	07/08/2013 1607 SL
Cation-Anion Balance (± 5%)	2.85	%		0.01	SM 1030E	07/08/2013 1607 SL
Solids, Total Dissolved (Calc)	880	mg/L		10	SM 1030E	07/08/2013 1607 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-003  
**ClientSample ID:** 5368-24-12SM  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 1:30:00 PM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/28/2013 2024	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/27/2013 1629	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1629	MS
Boron	0.5	mg/L		0.1	EPA 200.7	06/28/2013 2024	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1629	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 2024	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1629	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 2024	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1629	MS
Mercury	ND	mg/L		0.001	EPA 245.1	07/02/2013 1112	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1629	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 2024	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/27/2013 1629	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1629	MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	06/27/2013 1629	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1629	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 2024	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1328	MS
<b>Metals - Total</b>							
Iron	0.94	mg/L		0.05	EPA 200.7	06/29/2013 104	BK
Manganese	0.02	mg/L		0.02	EPA 200.7	06/29/2013 104	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/16/2013  
**Report ID:** S1306460001

**ProjectName:** Kendrick  
**Lab ID:** S1306460-003  
**ClientSample ID:** 5368-24-12SM  
**COC:** 150412

**WorkOrder:** S1306460  
**CollectionDate:** 6/26/2013 1:30:00 PM  
**DateReceived:** 6/26/2013 4:30:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	07/24/2013 1709	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/24/2013 1709	SH
Gross Beta	ND	pCi/L		4	SM 7110B	07/24/2013 1709	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/24/2013 1709	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/18/2013 1442	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/18/2013 1442	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/31/2013 1449	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/31/2013 1449	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2013 609	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2013 609	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/18/2013 738	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/18/2013 738	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/24/2013  
**Report ID:** S1306230001

**ProjectName:** Kendrick  
**Lab ID:** S1306230-002  
**ClientSample ID:** 5368-24-12SA  
**COC:** 150404

**WorkOrder:** S1306230  
**CollectionDate:** 6/13/2013 12:20:00 PM  
**DateReceived:** 6/13/2013 4:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.67	s.u.			Field	06/13/2013 1220
Conductivity	1134	µmhos/cm			Field	06/13/2013 1220
Dissolved Oxygen	1.13	mg/L			Field	06/13/2013 1220
Dissolved Oxygen (pct)	11.5	%			Field	06/13/2013 1220
Turbidity	12.02	NTU			Field	06/13/2013 1220
Temperature	15.4	°C			Field	06/13/2013 1220
Oxygen Reduction Potential (ORP)	+15	mV			Field	06/13/2013 1220
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	531	mg/L		5	SM 2320B	06/14/2013 1324 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	547	mg/L		5	SM 2320B	06/14/2013 1324 KV
Alkalinity, Carbonate as CO <sub>3</sub>	49	mg/L		5	SM 2320B	06/14/2013 1324 KV
Chloride	2	mg/L		1	EPA 300.0	06/15/2013 133 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	06/14/2013 1324 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/17/2013 1256 RH
Sulfate	51	mg/L		1	EPA 300.0	06/15/2013 133 AMB
Calcium	2	mg/L		1	EPA 200.7	06/17/2013 1947 DG
Magnesium	ND	mg/L		1	EPA 200.7	06/17/2013 1947 DG
Potassium	6	mg/L		1	EPA 200.7	06/17/2013 1947 DG
Sodium	271	mg/L		1	EPA 200.7	06/17/2013 1947 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/19/2013 937 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	06/14/2013 1324 KV
Electrical Conductivity	1050	µmhos/cm		5	SM 2510B	06/14/2013 1324 KV
Total Dissolved Solids (180)	650	mg/L		10	SM 2540	06/14/2013 1715 JCG
<b>Data Quality</b>						
Cation Sum	12.02	meq/L		0.01	SM 1030E	06/19/2013 1520 LJK
Anion Sum	11.74	meq/L		0.01	SM 1030E	06/19/2013 1520 LJK
Cation-Anion Balance (± 5%)	1.15	%		0.01	SM 1030E	06/19/2013 1520 LJK
Solids, Total Dissolved (Calc)	650	mg/L		10	SM 1030E	06/19/2013 1520 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/24/2013  
**Report ID:** S1306230001

**ProjectName:** Kendrick  
**Lab ID:** S1306230-002  
**ClientSample ID:** 5368-24-12SA  
**COC:** 150404

**WorkOrder:** S1306230  
**CollectionDate:** 6/13/2013 12:20:00 PM  
**DateReceived:** 6/13/2013 4:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/17/2013 1947	DG
Arsenic	0.025	mg/L		0.005	EPA 200.8	06/14/2013 1316	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/14/2013 1316	MS
Boron	0.2	mg/L		0.1	EPA 200.7	06/17/2013 1947	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/14/2013 1316	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/17/2013 1947	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/14/2013 1316	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/17/2013 1947	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/14/2013 1316	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/19/2013 1239	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/14/2013 1316	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/17/2013 1947	DG
Selenium	0.009	mg/L		0.005	EPA 200.8	06/14/2013 1316	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/14/2013 1316	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/14/2013 1316	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/14/2013 1316	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/17/2013 1947	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/08/2013 1749	MS
<b>Metals - Total</b>							
Iron	0.56	mg/L		0.05	EPA 200.7	06/19/2013 1057	DG
Manganese	ND	mg/L		0.02	EPA 200.7	06/19/2013 1057	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/24/2013  
**Report ID:** S1306230001

**ProjectName:** Kendrick  
**Lab ID:** S1306230-002  
**ClientSample ID:** 5368-24-12SA  
**COC:** 150404

**WorkOrder:** S1306230  
**CollectionDate:** 6/13/2013 12:20:00 PM  
**DateReceived:** 6/13/2013 4:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	2.2	pCi/L		2	SM 7110B	07/02/2013 1654 SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	07/02/2013 1654 SH
Gross Beta	ND	pCi/L		4	SM 7110B	07/02/2013 1654 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/02/2013 1654 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/05/2013 940 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/05/2013 940 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/07/2013 848 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/07/2013 848 WN
Thorium 230	ND	pCi/L		0.2	ACW10	06/25/2013 811 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	06/25/2013 811 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	06/25/2013 1359 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	06/25/2013 1359 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/01/2013 805 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/01/2013 805 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-003  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 3:10:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.56	s.u.			Field	06/25/2013 1510
Conductivity	1848	µmhos/cm			Field	06/25/2013 1510
Dissolved Oxygen	1.37	mg/L			Field	06/25/2013 1510
Dissolved Oxygen (pct)	13.5	%			Field	06/25/2013 1510
Turbidity	88.1	NTU			Field	06/25/2013 1510
Temperature	14.4	°C			Field	06/25/2013 1510
Oxygen Reduction Potential (ORP)	+52	mV			Field	06/25/2013 1510
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	598	mg/L		5	SM 2320B	06/27/2013 2337 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	599	mg/L		5	SM 2320B	06/27/2013 2337 KV
Alkalinity, Carbonate as CO <sub>3</sub>	64	mg/L		5	SM 2320B	06/27/2013 2337 KV
Chloride	4	mg/L		1	EPA 300.0	06/28/2013 425 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	06/27/2013 2337 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/01/2013 1208 RH
Sulfate	356	mg/L		1	EPA 300.0	06/28/2013 425 AMB
Calcium	2	mg/L		1	EPA 200.7	06/27/2013 2001 BK
Magnesium	ND	mg/L		1	EPA 200.7	06/27/2013 2001 BK
Potassium	11	mg/L		1	EPA 200.7	06/27/2013 2001 BK
Sodium	432	mg/L		1	EPA 200.7	06/27/2013 2001 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/01/2013 1446 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	06/27/2013 2337 KV
Electrical Conductivity	1860	µmhos/cm		5	SM 2510B	06/27/2013 2337 KV
Total Dissolved Solids (180)	1210	mg/L		10	SM 2540	06/28/2013 1304 JCG
<b>Data Quality</b>						
Cation Sum	19.19	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Anion Sum	19.54	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Cation-Anion Balance (± 5%)	0.90	%		0.01	SM 1030E	07/03/2013 1644 SL
Solids, Total Dissolved (Calc)	1160	mg/L		10	SM 1030E	07/03/2013 1644 SL

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-003  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 3:10:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.1	mg/L		0.1	EPA 200.7	06/27/2013 2001	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/27/2013 1432	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1432	MS
Boron	0.5	mg/L		0.1	EPA 200.7	06/27/2013 2001	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1432	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/27/2013 2001	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1432	MS
Iron	0.06	mg/L		0.05	EPA 200.7	06/27/2013 2001	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1432	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 1147	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1432	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/27/2013 2001	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/27/2013 1432	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1432	MS
Uranium	0.0009	mg/L		0.0003	EPA 200.8	06/27/2013 1432	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1432	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/27/2013 2001	BK
<b>Metals - Suspended</b>							
Uranium	0.0003	mg/L		0.0003	EPA 200.8	07/05/2013 1257	MS
<b>Metals - Total</b>							
Iron	2.68	mg/L		0.05	EPA 200.7	06/29/2013 055	BK
Manganese	0.05	mg/L		0.02	EPA 200.7	06/29/2013 055	BK

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-003  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 3:10:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.5	pCi/L		2	SM 7110B	08/01/2013 1753	SH
Gross Alpha Precision (±)	2.3	pCi/L			SM 7110B	08/01/2013 1753	SH
Gross Beta	8.6	pCi/L		3	SM 7110B	08/01/2013 1753	SH
Gross Beta Precision (±)	3.5	pCi/L			SM 7110B	08/01/2013 1753	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2013 1005	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/27/2013 757	SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/27/2013 757	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 759	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 1500	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 1500	MB

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-004  
**ClientSample ID:** 5368-43-24SM  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 4:10:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.17	s.u.			Field	06/25/2013 1610
Conductivity	1882	µmhos/cm			Field	06/25/2013 1610
Dissolved Oxygen	0.91	mg/L			Field	06/25/2013 1610
Dissolved Oxygen (pct)	9.0	%			Field	06/25/2013 1610
Turbidity	4.73	NTU			Field	06/25/2013 1610
Temperature	14.2	°C			Field	06/25/2013 1610
Oxygen Reduction Potential (ORP)	-100	mV			Field	06/25/2013 1610
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	589	mg/L		5	SM 2320B	06/27/2013 2350 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	643	mg/L		5	SM 2320B	06/27/2013 2350 KV
Alkalinity, Carbonate as CO <sub>3</sub>	37	mg/L		5	SM 2320B	06/27/2013 2350 KV
Chloride	5	mg/L		1	EPA 300.0	06/28/2013 1355 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	06/27/2013 2350 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/01/2013 1218 RH
Sulfate	327	mg/L		1	EPA 300.0	06/28/2013 1355 AMB
Calcium	4	mg/L		1	EPA 200.7	06/27/2013 2003 BK
Magnesium	2	mg/L		1	EPA 200.7	06/27/2013 2003 BK
Potassium	4	mg/L		1	EPA 200.7	06/27/2013 2003 BK
Sodium	428	mg/L		1	EPA 200.7	06/27/2013 2003 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	07/01/2013 1447 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	06/27/2013 2350 KV
Electrical Conductivity	1800	µmhos/cm		5	SM 2510B	06/27/2013 2350 KV
Total Dissolved Solids (180)	1160	mg/L		10	SM 2540	06/28/2013 1305 JCG
<b>Data Quality</b>						
Cation Sum	19.08	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Anion Sum	18.77	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Cation-Anion Balance (± 5%)	0.83	%		0.01	SM 1030E	07/03/2013 1644 SL
Solids, Total Dissolved (Calc)	1120	mg/L		10	SM 1030E	07/03/2013 1644 SL

## These results apply only to the samples tested.

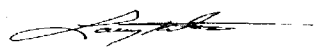
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-004  
**ClientSample ID:** 5368-43-24SM  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 4:10:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/27/2013 2003	BK
Arsenic	0.008	mg/L		0.005	EPA 200.8	06/27/2013 1437	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1437	MS
Boron	0.5	mg/L		0.1	EPA 200.7	06/27/2013 2003	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1437	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/27/2013 2003	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1437	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/27/2013 2003	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1437	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 1149	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1437	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/27/2013 2003	BK
Selenium	0.014	mg/L		0.005	EPA 200.8	06/27/2013 1437	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1437	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/27/2013 1437	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1437	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/27/2013 2003	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1312	MS
<b>Metals - Total</b>							
Iron	0.17	mg/L		0.05	EPA 200.7	06/29/2013 057	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/29/2013 057	BK

These results apply only to the samples tested.

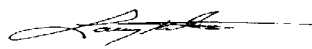
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-004  
**ClientSample ID:** 5368-43-24SM  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 4:10:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		5	SM 7110B	07/23/2013 2304 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 2304 SH
Gross Beta	ND	pCi/L		7	SM 7110B	07/23/2013 2304 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 2304 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2013 1005 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/27/2013 1058 SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/27/2013 1058 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 1431 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 1431 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1036 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 1500 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 1500 MB

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-003  
**ClientSample ID:** 5368-43-24SA  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 11:10:00 AM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.12	s.u.			Field	06/20/2013 1110
Conductivity	848	µmhos/cm			Field	06/20/2013 1110
Dissolved Oxygen	1.40	mg/L			Field	06/20/2013 1110
Dissolved Oxygen (pct)	14.8	%			Field	06/20/2013 1110
Turbidity	18.76	NTU			Field	06/20/2013 1110
Temperature	17.5	°C			Field	06/20/2013 1110
Oxygen Reduction Potential (ORP)	-24	mV			Field	06/20/2013 1110
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	364	mg/L		5	SM 2320B	06/24/2013 2159 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	440	mg/L		5	SM 2320B	06/24/2013 2159 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	06/24/2013 2159 KV
Chloride	4	mg/L		1	EPA 300.0	06/26/2013 2014 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	06/24/2013 2159 KV
Nitrogen, Nitrate+Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	06/25/2013 1243 RH
Sulfate	75	mg/L		1	EPA 300.0	06/26/2013 2014 AMB
Calcium	44	mg/L		1	EPA 200.7	06/24/2013 1837 DG
Magnesium	23	mg/L		1	EPA 200.7	06/24/2013 1837 DG
Potassium	9	mg/L		1	EPA 200.7	06/24/2013 1837 DG
Sodium	102	mg/L		1	EPA 200.7	06/24/2013 1837 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	07/01/2013 1518 RH
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	06/24/2013 2159 KV
Electrical Conductivity	887	µmhos/cm		5	SM 2510B	06/24/2013 2159 KV
Total Dissolved Solids (180)	520	mg/L		10	SM 2540	06/24/2013 1128 JCG
<b>Data Quality</b>						
Cation Sum	8.77	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Anion Sum	9.01	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Cation-Anion Balance (± 5%)	1.33	%		0.01	SM 1030E	07/03/2013 1350 JJ
Solids, Total Dissolved (Calc)	480	mg/L		10	SM 1030E	07/03/2013 1350 JJ

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-003  
**ClientSample ID:** 5368-43-24SA  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 11:10:00 AM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/24/2013 1837	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/22/2013 136	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/22/2013 136	MS
Boron	ND	mg/L		0.1	EPA 200.7	06/24/2013 1837	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/22/2013 136	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/24/2013 1837	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/22/2013 136	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/24/2013 1837	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/22/2013 136	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/27/2013 1018	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/22/2013 136	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/24/2013 1837	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/22/2013 136	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/22/2013 136	MS
Uranium	0.0483	mg/L		0.0003	EPA 200.8	06/22/2013 136	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/22/2013 136	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/24/2013 1837	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2200	MS
<b>Metals - Total</b>							
Iron	0.52	mg/L		0.05	EPA 200.7	06/24/2013 1912	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1912	BK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-003  
**ClientSample ID:** 5368-43-24SA  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 11:10:00 AM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	33.1	pCi/L		2	SM 7110B	07/23/2013 2304	SH
Gross Alpha Precision (±)	2.6	pCi/L			SM 7110B	07/23/2013 2304	SH
Gross Beta	21.4	pCi/L		3	SM 7110B	07/23/2013 2304	SH
Gross Beta Precision (±)	1.8	pCi/L			SM 7110B	07/23/2013 2304	SH
Radium 226	0.6	pCi/L		0.2	SM 7500 Ra-B	07/08/2013 1406	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/08/2013 1406	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2013 1908	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2013 1908	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/03/2013 1227	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/03/2013 1227	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 759	MB

## These results apply only to the samples tested.

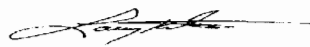
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-003  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 3:50:00 PM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.63	s.u.			Field	06/24/2013 1550
Conductivity	1456	µmhos/cm			Field	06/24/2013 1550
Dissolved Oxygen	1.86	mg/L			Field	06/24/2013 1550
Dissolved Oxygen (pct)	18.9	%			Field	06/24/2013 1550
Turbidity	11.37	NTU			Field	06/24/2013 1550
Temperature	14.2	°C			Field	06/24/2013 1550
Oxygen Reduction Potential (ORP)	-102	mV			Field	06/24/2013 1550
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	454	mg/L		5	SM 2320B	06/27/2013 1640 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	463	mg/L		5	SM 2320B	06/27/2013 1640 KV
Alkalinity, Carbonate as CO <sub>3</sub>	45	mg/L		5	SM 2320B	06/27/2013 1640 KV
Chloride	5	mg/L		1	EPA 300.0	06/26/2013 2148 AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	06/27/2013 1640 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1149 RH
Sulfate	226	mg/L		1	EPA 300.0	06/26/2013 2148 AMB
Calcium	2	mg/L		1	EPA 200.7	06/28/2013 1559 BK
Magnesium	ND	mg/L		1	EPA 200.7	06/28/2013 1559 BK
Potassium	4	mg/L		1	EPA 200.7	06/28/2013 1559 BK
Sodium	346	mg/L		1	EPA 200.7	06/28/2013 1559 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1228 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	06/27/2013 1640 KV
Electrical Conductivity	1490	µmhos/cm		5	SM 2510B	06/27/2013 1640 KV
Total Dissolved Solids (180)	890	mg/L		10	SM 2540	06/28/2013 1211 JCG
Total Suspended Solids	25	mg/L		5	SM 2540	06/27/2013 1228 JCG
Turbidity	11.2	NTU		0.1	SM 2130	06/26/2013 1045 MZ
<b>Data Quality</b>						
Cation Sum	15.23	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Anion Sum	13.95	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Cation-Anion Balance (± 5%)	4.40	%		0.01	SM 1030E	07/08/2013 1601 SL
Solids, Total Dissolved (Calc)	860	mg/L		10	SM 1030E	07/08/2013 1601 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
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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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-003  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 3:50:00 PM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/28/2013 1559	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/26/2013 1441	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/26/2013 1441	MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/28/2013 1559	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/26/2013 1441	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 1559	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/26/2013 1441	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 1559	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/26/2013 1441	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 945	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/26/2013 1441	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 1559	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/26/2013 1441	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/26/2013 1441	MS
Uranium	0.0093	mg/L		0.0003	EPA 200.8	06/26/2013 1441	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/26/2013 1441	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 1559	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1236	MS
<b>Metals - Total</b>							
Iron	0.33	mg/L		0.05	EPA 200.7	06/28/2013 2331	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/28/2013 2331	BK

## These results apply only to the samples tested.

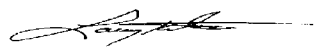
**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-003  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 3:50:00 PM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	34.1	pCi/L		3	SM 7110B	07/24/2013 1709	SH
Gross Alpha Precision (±)	3.6	pCi/L			SM 7110B	07/24/2013 1709	SH
Gross Beta	ND	pCi/L		5	SM 7110B	07/24/2013 1709	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/24/2013 1709	SH
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/11/2013 1005	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/26/2013 1953	SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/26/2013 1953	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 1431	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 1431	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 853	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 853	MB

## These results apply only to the samples tested.

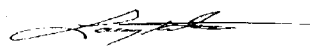
**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-004  
**ClientSample ID:** 5368-32-23SM  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 4:10:00 PM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.67	s.u.			Field	06/24/2013 1610
Conductivity	1532	µmhos/cm			Field	06/24/2013 1610
Dissolved Oxygen	1.41	mg/L			Field	06/24/2013 1610
Dissolved Oxygen (pct)	13.6	%			Field	06/24/2013 1610
Turbidity	0.99	NTU			Field	06/24/2013 1610
Temperature	13.8	°C			Field	06/24/2013 1610
Oxygen Reduction Potential (ORP)	-83	mV			Field	06/24/2013 1610
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	575	mg/L		5	SM 2320B	07/03/2013 1621 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	579	mg/L		5	SM 2320B	07/03/2013 1621 KV
Alkalinity, Carbonate as CO <sub>3</sub>	60	mg/L		5	SM 2320B	07/03/2013 1621 KV
Chloride	3	mg/L		1	EPA 300.0	07/03/2013 1802 AMB
Fluoride	1.6	mg/L		0.1	SM 4500FC	06/27/2013 1648 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/05/2013 1119 RH
Sulfate	196	mg/L		1	EPA 300.0	06/26/2013 2200 AMB
Calcium	2	mg/L		1	EPA 200.7	07/03/2013 1436 BK
Magnesium	ND	mg/L		1	EPA 200.7	07/03/2013 1436 BK
Potassium	8	mg/L		1	EPA 200.7	06/28/2013 1613 BK
Sodium	370	mg/L		1	EPA 200.7	07/03/2013 1436 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	07/05/2013 1229 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	06/27/2013 1648 KV
Electrical Conductivity	1550	µmhos/cm		5	SM 2510B	06/27/2013 1648 KV
Total Dissolved Solids (180)	930	mg/L		10	SM 2540	06/28/2013 1212 JCG
Total Suspended Solids	7	mg/L		5	SM 2540	06/27/2013 1229 JCG
Turbidity	0.9	NTU		0.1	SM 2130	06/26/2013 1045 MZ
<b>Data Quality</b>						
Cation Sum	16.38	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Anion Sum	15.75	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Cation-Anion Balance (± 5%)	1.97	%		0.01	SM 1030E	07/08/2013 1601 SL
Solids, Total Dissolved (Calc)	920	mg/L		10	SM 1030E	07/08/2013 1601 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-004  
**ClientSample ID:** 5368-32-23SM  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 4:10:00 PM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/28/2013 1613	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/26/2013 1446	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/26/2013 1446	MS
Boron	0.5	mg/L		0.1	EPA 200.7	06/28/2013 1613	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/26/2013 1446	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 1613	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/26/2013 1446	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 1613	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/26/2013 1446	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 947	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/26/2013 1446	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 1613	BK
Selenium	0.007	mg/L		0.005	EPA 200.8	06/26/2013 1446	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/26/2013 1446	MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	06/26/2013 1446	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/26/2013 1446	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 1613	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1241	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 2333	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/28/2013 2333	BK

## These results apply only to the samples tested.


**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-004  
**ClientSample ID:** 5368-32-23SM  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 4:10:00 PM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	07/24/2013 1709	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/24/2013 1709	SH
Gross Beta	ND	pCi/L		5	SM 7110B	07/24/2013 1709	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/24/2013 1709	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2013 1005	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/26/2013 2254	SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/26/2013 2254	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/12/2013 929	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/12/2013 929	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 1500	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 1500	MB

## These results apply only to the samples tested.

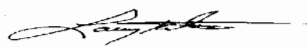
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-002  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 10:45:00 AM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.39	s.u.			Field	06/24/2013 1045
Conductivity	1525	µmhos/cm			Field	06/24/2013 1045
Dissolved Oxygen	1.02	mg/L			Field	06/24/2013 1045
Dissolved Oxygen (pct)	10.1	%			Field	06/24/2013 1045
Turbidity	15.63	NTU			Field	06/24/2013 1045
Temperature	14.1	°C			Field	06/24/2013 1045
Oxygen Reduction Potential (ORP)	+9	mV			Field	06/24/2013 1045
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	518	mg/L		5	SM 2320B	07/03/2013 1611 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	567	mg/L		5	SM 2320B	07/03/2013 1611 KV
Alkalinity, Carbonate as CO <sub>3</sub>	32	mg/L		5	SM 2320B	07/03/2013 1611 KV
Chloride	8	mg/L		1	EPA 300.0	06/26/2013 2135 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	06/27/2013 1630 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1147 RH
Sulfate	271	mg/L		1	EPA 300.0	06/26/2013 2135 AMB
Calcium	3	mg/L		1	EPA 200.7	07/03/2013 1434 BK
Magnesium	1	mg/L		1	EPA 200.7	07/03/2013 1434 BK
Potassium	6	mg/L		1	EPA 200.7	07/03/2013 1434 BK
Sodium	390	mg/L		1	EPA 200.7	07/03/2013 1434 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/05/2013 1227 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	06/27/2013 1630 KV
Electrical Conductivity	1700	µmhos/cm		5	SM 2510B	06/27/2013 1630 KV
Total Dissolved Solids (180)	1000	mg/L		10	SM 2540	06/28/2013 1210 JCG
Total Suspended Solids	66	mg/L		5	SM 2540	06/27/2013 1227 JCG
Turbidity	12.5	NTU		0.1	SM 2130	06/26/2013 1045 MZ
<b>Data Quality</b>						
Cation Sum	17.40	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Anion Sum	16.29	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Cation-Anion Balance (± 5%)	3.29	%		0.01	SM 1030E	07/08/2013 1601 SL
Solids, Total Dissolved (Calc)	990	mg/L		10	SM 1030E	07/08/2013 1601 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

Page 4 of 12



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-002  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 10:45:00 AM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/28/2013 1554	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/26/2013 1435	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/26/2013 1435	MS
Boron	0.5	mg/L		0.1	EPA 200.7	06/28/2013 1554	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/26/2013 1435	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 1554	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/26/2013 1435	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 1554	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/26/2013 1435	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 943	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/26/2013 1435	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 1554	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/26/2013 1435	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/26/2013 1435	MS
Uranium	0.0114	mg/L		0.0003	EPA 200.8	06/26/2013 1435	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/26/2013 1435	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 1554	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1231	MS
<b>Metals - Total</b>							
Iron	1.24	mg/L		0.05	EPA 200.7	06/28/2013 2328	BK
Manganese	0.02	mg/L		0.02	EPA 200.7	06/28/2013 2328	BK

These results apply only to the samples tested.

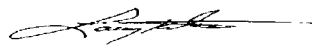
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-002  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 10:45:00 AM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	19.4	pCi/L		3	SM 7110B	07/24/2013 1709	SH
Gross Alpha Precision (±)	2.9	pCi/L			SM 7110B	07/24/2013 1709	SH
Gross Beta	8.7	pCi/L		4	SM 7110B	07/24/2013 1709	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	07/24/2013 1709	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/11/2013 1005	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/26/2013 1652	SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/26/2013 1652	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 1431	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 1431	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 853	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 853	MB

These results apply only to the samples tested.

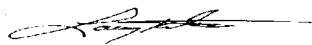
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-001  
**ClientSample ID:** 5368-41-36SM  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 10:00:00 AM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.50	s.u.			Field	06/24/2013 1000
Conductivity	1412	µmhos/cm			Field	06/24/2013 1000
Dissolved Oxygen	1.01	mg/L			Field	06/24/2013 1000
Dissolved Oxygen (pct)	9.6	%			Field	06/24/2013 1000
Turbidity	110	NTU			Field	06/24/2013 1000
Temperature	12.8	°C			Field	06/24/2013 1000
Oxygen Reduction Potential (ORP)	+68	mV			Field	06/24/2013 1000
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	497	mg/L		5	SM 2320B	06/27/2013 1621 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	229	mg/L		5	SM 2320B	06/27/2013 1621 KV
Alkalinity, Carbonate as CO <sub>3</sub>	185	mg/L		5	SM 2320B	06/27/2013 1621 KV
Chloride	6	mg/L		1	EPA 300.0	06/26/2013 2122 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	06/27/2013 1621 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/02/2013 1146 RH
Sulfate	219	mg/L		1	EPA 300.0	06/26/2013 2122 AMB
Calcium	1	mg/L		1	EPA 200.7	06/28/2013 1552 BK
Magnesium	ND	mg/L		1	EPA 200.7	06/28/2013 1552 BK
Potassium	12	mg/L		1	EPA 200.7	06/28/2013 1552 BK
Sodium	359	mg/L		1	EPA 200.7	06/28/2013 1552 BK
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	07/05/2013 1221 RH
<b>General Parameters</b>						
pH	10.0	s.u.		0.1	SM 4500 H B	06/27/2013 1621 KV
Electrical Conductivity	1620	µmhos/cm		5	SM 2510B	06/27/2013 1621 KV
Total Dissolved Solids (180)	930	mg/L		10	SM 2540	06/28/2013 1209 JCG
Total Suspended Solids	105	mg/L		5	SM 2540	06/27/2013 1226 JCG
Turbidity	90.5	NTU		0.1	SM 2130	06/26/2013 1045 MZ
<b>Data Quality</b>						
Cation Sum	15.99	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Anion Sum	14.73	meq/L		0.01	SM 1030E	07/08/2013 1601 SL
Cation-Anion Balance (± 5%)	4.10	%		0.01	SM 1030E	07/08/2013 1601 SL
Solids, Total Dissolved (Calc)	900	mg/L		10	SM 1030E	07/08/2013 1601 SL

These results apply only to the samples tested.

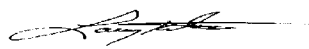
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-001  
**ClientSample ID:** 5368-41-36SM  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 10:00:00 AM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	06/28/2013 1552	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/26/2013 1416	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/26/2013 1416	MS
Boron	0.4	mg/L		0.1	EPA 200.7	06/28/2013 1552	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/26/2013 1416	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/28/2013 1552	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/26/2013 1416	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/28/2013 1552	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/26/2013 1416	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 941	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/26/2013 1416	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/28/2013 1552	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/26/2013 1416	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/26/2013 1416	MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	06/26/2013 1416	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/26/2013 1416	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/28/2013 1552	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1211	MS
<b>Metals - Total</b>							
Iron	2.65	mg/L		0.05	EPA 200.7	06/28/2013 2326	BK
Manganese	0.04	mg/L		0.02	EPA 200.7	06/28/2013 2326	BK

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306426001

**ProjectName:** Kendrick  
**Lab ID:** S1306426-001  
**ClientSample ID:** 5368-41-36SM  
**COC:** 150410

**WorkOrder:** S1306426  
**CollectionDate:** 6/24/2013 10:00:00 AM  
**DateReceived:** 6/25/2013 7:24:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	07/24/2013 1709 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/24/2013 1709 SH
Gross Beta	7.9	pCi/L		4	SM 7110B	07/24/2013 1709 SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	07/24/2013 1709 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2013 1005 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/26/2013 1351 SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/26/2013 1351 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 1431 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 1431 MB
<b>Radionuclides - Suspended</b>						
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036 SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/25/2013 1036 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 853 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 853 MB

## These results apply only to the samples tested.

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-007  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 2:30:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.37	s.u.			Field	06/19/2013 1430
Conductivity	1347	µmhos/cm			Field	06/19/2013 1430
Dissolved Oxygen	1.31	mg/L			Field	06/19/2013 1430
Dissolved Oxygen (pct)	13.4	%			Field	06/19/2013 1430
Turbidity	2.35	NTU			Field	06/19/2013 1430
Temperature	15.3	°C			Field	06/19/2013 1430
Oxygen Reduction Potential (ORP)	+97	mV			Field	06/19/2013 1430
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	410	mg/L		5	SM 2320B	06/21/2013 2151 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	362	mg/L		5	SM 2320B	06/21/2013 2151 KV
Alkalinity, Carbonate as CO <sub>3</sub>	68	mg/L		5	SM 2320B	06/21/2013 2151 KV
Chloride	21	mg/L		1	EPA 300.0	06/22/2013 522 AMB
Fluoride	2.1	mg/L		0.1	SM 4500FC	06/21/2013 2151 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/21/2013 1416 RH
Sulfate	237	mg/L		1	EPA 300.0	06/22/2013 522 AMB
Calcium	2	mg/L		1	EPA 200.7	06/21/2013 2149 DG
Magnesium	ND	mg/L		1	EPA 200.7	06/21/2013 2149 DG
Potassium	2	mg/L		1	EPA 200.7	06/21/2013 2149 DG
Sodium	339	mg/L		1	EPA 200.7	06/21/2013 2149 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1529 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	06/21/2013 2151 KV
Electrical Conductivity	1530	µmhos/cm		5	SM 2510B	06/21/2013 2151 KV
Total Dissolved Solids (180)	880	mg/L		10	SM 2540	06/20/2013 1207 JCG
<b>Data Quality</b>						
Cation Sum	14.91	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	13.83	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	3.75	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	850	mg/L		10	SM 1030E	06/27/2013 1437 LJK

## These results apply only to the samples tested.

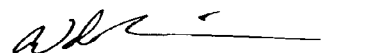
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-007  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 2:30:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/21/2013 2149	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/20/2013 2154	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2154	MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/21/2013 2149	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2154	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2149	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2154	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/21/2013 2149	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2154	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1224	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2154	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2149	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/20/2013 2154	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2154	MS
Uranium	0.0265	mg/L		0.0003	EPA 200.8	06/20/2013 2154	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2154	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2149	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2049	MS
<b>Metals - Total</b>							
Iron	0.19	mg/L		0.05	EPA 200.7	06/24/2013 1707	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1707	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-007  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 2:30:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	98.3	pCi/L		2	SM 7110B	07/16/2013 1653 SH
Gross Alpha Precision (±)	5.6	pCi/L			SM 7110B	07/16/2013 1653 SH
Gross Beta	15.7	pCi/L		3	SM 7110B	07/16/2013 1653 SH
Gross Beta Precision (±)	2.5	pCi/L			SM 7110B	07/16/2013 1653 SH
Radium 226	4.5	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336 SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	07/03/2013 1336 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/19/2013 1200 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/19/2013 1200 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/02/2013 1220 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/02/2013 1220 MB
<b>Radionuclides - Suspended</b>						
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251 SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/15/2013 1251 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 1319 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 1319 MB

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-008  
**ClientSample ID:** 5368-31-35SM  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 4:00:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.73	s.u.			Field	06/19/2013 1600
Conductivity	1415	µmhos/cm			Field	06/19/2013 1600
Dissolved Oxygen	1.05	mg/L			Field	06/19/2013 1600
Dissolved Oxygen (pct)	10.8	%			Field	06/19/2013 1600
Turbidity	15.27	NTU			Field	06/19/2013 1600
Temperature	16.1	°C			Field	06/19/2013 1600
Oxygen Reduction Potential (ORP)	+11	mV			Field	06/19/2013 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	464	mg/L		5	SM 2320B	06/21/2013 2200 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	484	mg/L		5	SM 2320B	06/21/2013 2200 KV
Alkalinity, Carbonate as CO <sub>3</sub>	40	mg/L		5	SM 2320B	06/21/2013 2200 KV
Chloride	11	mg/L		1	EPA 300.0	06/22/2013 534 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	06/21/2013 2200 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/21/2013 1417 RH
Sulfate	203	mg/L		1	EPA 300.0	06/22/2013 534 AMB
Calcium	1	mg/L		1	EPA 200.7	06/21/2013 2151 DG
Magnesium	ND	mg/L		1	EPA 200.7	06/21/2013 2151 DG
Potassium	13	mg/L		1	EPA 200.7	06/21/2013 2151 DG
Sodium	340	mg/L		1	EPA 200.7	06/21/2013 2151 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1530 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	06/21/2013 2200 KV
Electrical Conductivity	1480	µmhos/cm		5	SM 2510B	06/21/2013 2200 KV
Total Dissolved Solids (180)	850	mg/L		10	SM 2540	06/20/2013 1209 JCG
<b>Data Quality</b>						
Cation Sum	15.20	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	13.86	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	4.59	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	850	mg/L		10	SM 1030E	06/27/2013 1437 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-008  
**ClientSample ID:** 5368-31-35SM  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 4:00:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/21/2013 2151	DG
Arsenic	0.014	mg/L		0.005	EPA 200.8	06/20/2013 2159	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2159	MS
Boron	0.4	mg/L		0.1	EPA 200.7	06/21/2013 2151	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2159	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2151	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2159	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/21/2013 2151	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2159	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1226	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2159	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2151	DG
Selenium	0.009	mg/L		0.005	EPA 200.8	06/20/2013 2159	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2159	MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	06/20/2013 2159	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2159	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2151	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2054	MS
<b>Metals - Total</b>							
Iron	0.61	mg/L		0.05	EPA 200.7	06/24/2013 1709	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1709	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-008  
**ClientSample ID:** 5368-31-35SM  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 4:00:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	07/16/2013 1653	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/16/2013 1653	SH
Gross Beta	7.7	pCi/L		3	SM 7110B	07/16/2013 1653	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	07/16/2013 1653	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/03/2013 1336	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/19/2013 1501	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/19/2013 1501	MK
Thorium 230	0.2	pCi/L		0.2	ACW10	07/02/2013 1220	MB
Thorium 230 Precision (±)	0.1	pCi/L			ACW10	07/02/2013 1220	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 1319	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 1319	MB

## These results apply only to the samples tested.

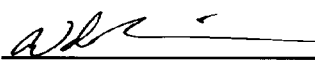
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-006  
**ClientSample ID:** 5368-31-35SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 2:00:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.46	s.u.			Field	06/19/2013 1400
Conductivity	1328	µmhos/cm			Field	06/19/2013 1400
Dissolved Oxygen	1.17	mg/L			Field	06/19/2013 1400
Dissolved Oxygen (pct)	13.0	%			Field	06/19/2013 1400
Turbidity	29.7	NTU			Field	06/19/2013 1400
Temperature	19.1	°C			Field	06/19/2013 1400
Oxygen Reduction Potential (ORP)	+92	mV			Field	06/19/2013 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	613	mg/L		5	SM 2320B	06/21/2013 2142 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	642	mg/L		5	SM 2320B	06/21/2013 2142 KV
Alkalinity, Carbonate as CO <sub>3</sub>	52	mg/L		5	SM 2320B	06/21/2013 2142 KV
Chloride	5	mg/L		1	EPA 300.0	06/22/2013 406 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	06/21/2013 2142 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/21/2013 1415 RH
Sulfate	82	mg/L		1	EPA 300.0	06/22/2013 406 AMB
Calcium	3	mg/L		1	EPA 200.7	06/21/2013 2142 DG
Magnesium	1	mg/L		1	EPA 200.7	06/21/2013 2142 DG
Potassium	8	mg/L		1	EPA 200.7	06/21/2013 2142 DG
Sodium	343	mg/L		1	EPA 200.7	06/21/2013 2142 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1528 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	06/21/2013 2142 KV
Electrical Conductivity	1390	µmhos/cm		5	SM 2510B	06/21/2013 2142 KV
Total Dissolved Solids (180)	810	mg/L		10	SM 2540	06/20/2013 1206 JCG
<b>Data Quality</b>						
Cation Sum	15.35	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	14.09	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	4.29	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	06/27/2013 1437 LJK

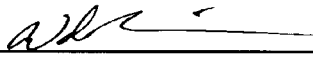
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-006  
**ClientSample ID:** 5368-31-35SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 2:00:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.1	mg/L		0.1	EPA 200.7	06/21/2013 2142	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/20/2013 2149	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2149	MS
Boron	ND	mg/L		0.1	EPA 200.7	06/21/2013 2142	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2149	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2142	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2149	MS
Iron	0.08	mg/L		0.05	EPA 200.7	06/21/2013 2142	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2149	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1222	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2149	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2142	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/20/2013 2149	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2149	MS
Uranium	0.0078	mg/L		0.0003	EPA 200.8	06/20/2013 2149	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2149	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2142	DG
<b>Metals - Suspended</b>							
Uranium	0.0004	mg/L		0.0003	EPA 200.8	06/25/2013 2044	MS
<b>Metals - Total</b>							
Iron	0.76	mg/L		0.05	EPA 200.7	06/24/2013 1705	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1705	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-006  
**ClientSample ID:** 5368-31-35SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 2:00:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	15.0	pCi/L		2	SM 7110B	07/16/2013 1653	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	07/16/2013 1653	SH
Gross Beta	8.7	pCi/L		3	SM 7110B	07/16/2013 1653	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	07/16/2013 1653	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/03/2013 1336	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/19/2013 859	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/19/2013 859	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/02/2013 1220	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/02/2013 1220	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251	SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/15/2013 1251	SH
Thorium 230	0.2	pCi/L		0.2	ACW10	07/09/2013 1319	MB
Thorium 230 Precision (±)	0.1	pCi/L			ACW10	07/09/2013 1319	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-002  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 12:45:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.44	s.u.			Field	06/25/2013 1245
Conductivity	1386	µmhos/cm			Field	06/25/2013 1245
Dissolved Oxygen	1.55	mg/L			Field	06/25/2013 1245
Dissolved Oxygen (pct)	15.6	%			Field	06/25/2013 1245
Turbidity	50.8	NTU			Field	06/25/2013 1245
Temperature	15.1	°C			Field	06/25/2013 1245
Oxygen Reduction Potential (ORP)	-83	mV			Field	06/25/2013 1245
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	472	mg/L		5	SM 2320B	06/27/2013 2325 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	489	mg/L		5	SM 2320B	06/27/2013 2325 KV
Alkalinity, Carbonate as CO <sub>3</sub>	43	mg/L		5	SM 2320B	06/27/2013 2325 KV
Chloride	6	mg/L		1	EPA 300.0	06/28/2013 412 AMB
Fluoride	0.9	mg/L		0.1	SM 4500FC	06/27/2013 2325 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/01/2013 1207 RH
Sulfate	250	mg/L		1	EPA 300.0	06/28/2013 412 AMB
Calcium	3	mg/L		1	EPA 200.7	06/27/2013 1959 BK
Magnesium	ND	mg/L		1	EPA 200.7	06/27/2013 1959 BK
Potassium	3	mg/L		1	EPA 200.7	06/27/2013 1959 BK
Sodium	322	mg/L		1	EPA 200.7	06/27/2013 1959 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	07/01/2013 1445 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	06/27/2013 2325 KV
Electrical Conductivity	1360	µmhos/cm		5	SM 2510B	06/27/2013 2325 KV
Total Dissolved Solids (180)	880	mg/L		10	SM 2540	06/28/2013 1303 JCG
<b>Data Quality</b>						
Cation Sum	14.26	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Anion Sum	14.86	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Cation-Anion Balance (± 5%)	2.07	%		0.01	SM 1030E	07/03/2013 1644 SL
Solids, Total Dissolved (Calc)	870	mg/L		10	SM 1030E	07/03/2013 1644 SL

These results apply only to the samples tested.

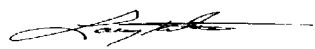
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-002  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 12:45:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	06/27/2013 1959	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	06/27/2013 1427	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1427	MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/27/2013 1959	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1427	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/27/2013 1959	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1427	MS
Iron	0.16	mg/L		0.05	EPA 200.7	06/27/2013 1959	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1427	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 1145	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1427	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/27/2013 1959	BK
Selenium	ND	mg/L		0.005	EPA 200.8	06/27/2013 1427	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1427	MS
Uranium	0.0011	mg/L		0.0003	EPA 200.8	06/27/2013 1427	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1427	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/27/2013 1959	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1252	MS
<b>Metals - Total</b>							
Iron	1.37	mg/L		0.05	EPA 200.7	06/29/2013 048	BK
Manganese	0.03	mg/L		0.02	EPA 200.7	06/29/2013 048	BK


## These results apply only to the samples tested.

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-002  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 12:45:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	07/23/2013 2304	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 2304	SH
Gross Beta	ND	pCi/L		4	SM 7110B	07/23/2013 2304	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 2304	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2013 1005	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/27/2013 456	SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/27/2013 456	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 759	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/25/2013 1036	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 1500	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 1500	MB

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-001  
**ClientSample ID:** 5368-12-25SM  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 1:00:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.84	s.u.			Field	06/25/2013 1300
Conductivity	1364	µmhos/cm			Field	06/25/2013 1300
Dissolved Oxygen	1.05	mg/L			Field	06/25/2013 1300
Dissolved Oxygen (pct)	10.3	%			Field	06/25/2013 1300
Turbidity	87.2	NTU			Field	06/25/2013 1300
Temperature	14.7	°C			Field	06/25/2013 1300
Oxygen Reduction Potential (ORP)	-48	mV			Field	06/25/2013 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	419	mg/L		5	SM 2320B	06/27/2013 2312 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	374	mg/L		5	SM 2320B	06/27/2013 2312 KV
Alkalinity, Carbonate as CO <sub>3</sub>	67	mg/L		5	SM 2320B	06/27/2013 2312 KV
Chloride	10	mg/L		1	EPA 300.0	06/28/2013 400 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	06/27/2013 2312 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/01/2013 1206 RH
Sulfate	218	mg/L		1	EPA 300.0	06/28/2013 400 AMB
Calcium	1	mg/L		1	EPA 200.7	06/27/2013 1956 BK
Magnesium	ND	mg/L		1	EPA 200.7	06/27/2013 1956 BK
Potassium	8	mg/L		1	EPA 200.7	06/27/2013 1956 BK
Sodium	309	mg/L		1	EPA 200.7	06/27/2013 1956 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	07/01/2013 1437 RH
<b>General Parameters</b>						
pH	9.4	s.u.		0.1	SM 4500 H B	06/27/2013 2312 KV
Electrical Conductivity	1280	µmhos/cm		5	SM 2510B	06/27/2013 2312 KV
Total Dissolved Solids (180)	820	mg/L		10	SM 2540	06/28/2013 1302 JCG
<b>Data Quality</b>						
Cation Sum	13.68	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Anion Sum	13.26	meq/L		0.01	SM 1030E	07/03/2013 1644 SL
Cation-Anion Balance (± 5%)	1.57	%		0.01	SM 1030E	07/03/2013 1644 SL
Solids, Total Dissolved (Calc)	800	mg/L		10	SM 1030E	07/03/2013 1644 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-001  
**ClientSample ID:** 5368-12-25SM  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 1:00:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.3	mg/L		0.1	EPA 200.7	06/27/2013 1956	BK
Arsenic	0.009	mg/L		0.005	EPA 200.8	06/27/2013 1421	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/27/2013 1421	MS
Boron	0.4	mg/L		0.1	EPA 200.7	06/27/2013 1956	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	06/27/2013 1421	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/27/2013 1956	BK
Copper	ND	mg/L		0.01	EPA 200.8	06/27/2013 1421	MS
Iron	0.11	mg/L		0.05	EPA 200.7	06/27/2013 1956	BK
Lead	ND	mg/L		0.02	EPA 200.8	06/27/2013 1421	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/28/2013 1143	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/27/2013 1421	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/27/2013 1956	BK
Selenium	0.006	mg/L		0.005	EPA 200.8	06/27/2013 1421	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/27/2013 1421	MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	06/27/2013 1421	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/27/2013 1421	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/27/2013 1956	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	07/05/2013 1247	MS
<b>Metals - Total</b>							
Iron	3.07	mg/L		0.05	EPA 200.7	06/29/2013 036	BK
Manganese	0.06	mg/L		0.02	EPA 200.7	06/29/2013 036	BK

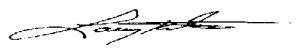
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/6/2013  
**Report ID** S1306450001

**ProjectName:** Kendrick  
**Lab ID:** S1306450-001  
**ClientSample ID:** 5368-12-25SM  
**COC:** 150411

**WorkOrder:** S1306450  
**CollectionDate:** 6/25/2013 1:00:00 PM  
**DateReceived:** 6/26/2013 7:31:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	07/23/2013 2304 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 2304 SH
Gross Beta	4.9	pCi/L		4	SM 7110B	07/23/2013 2304 SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	07/23/2013 2304 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2013 1005 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2013 1005 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/27/2013 155 SH
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/27/2013 155 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 759 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 759 MB
<b>Radionuclides - Suspended</b>						
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	07/25/2013 1036 SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/25/2013 1036 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/17/2013 1500 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/17/2013 1500 MB

## These results apply only to the samples tested.

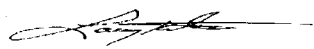
**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-004  
**ClientSample ID:** 5368-12-25SA  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 4:40:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.16	s.u.			Field	06/20/2013 1640
Conductivity	1396	µmhos/cm			Field	06/20/2013 1640
Dissolved Oxygen	0.81	mg/L			Field	06/20/2013 1640
Dissolved Oxygen (pct)	8.8	%			Field	06/20/2013 1640
Turbidity	7.56	NTU			Field	06/20/2013 1640
Temperature	18.6	°C			Field	06/20/2013 1640
Oxygen Reduction Potential (ORP)	-83	mV			Field	06/20/2013 1640
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	568	mg/L		5	SM 2320B	06/24/2013 2208 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	676	mg/L		5	SM 2320B	06/24/2013 2208 KV
Alkalinity, Carbonate as CO <sub>3</sub>	9	mg/L		5	SM 2320B	06/24/2013 2208 KV
Chloride	2	mg/L		1	EPA 300.0	06/26/2013 2025 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	06/24/2013 2208 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/25/2013 1247 RH
Sulfate	161	mg/L		1	EPA 300.0	06/26/2013 2025 AMB
Calcium	25	mg/L		1	EPA 200.7	06/24/2013 1839 DG
Magnesium	14	mg/L		1	EPA 200.7	06/24/2013 1839 DG
Potassium	23	mg/L		1	EPA 200.7	06/24/2013 1839 DG
Sodium	261	mg/L		1	EPA 200.7	06/24/2013 1839 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	07/01/2013 1519 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	06/24/2013 2208 KV
Electrical Conductivity	1500	µmhos/cm		5	SM 2510B	06/24/2013 2208 KV
Total Dissolved Solids (180)	880	mg/L		10	SM 2540	06/24/2013 1129 JCG
<b>Data Quality</b>						
Cation Sum	14.34	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Anion Sum	14.76	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Cation-Anion Balance (± 5%)	1.45	%		0.01	SM 1030E	07/03/2013 1350 JJ
Solids, Total Dissolved (Calc)	830	mg/L		10	SM 1030E	07/03/2013 1350 JJ

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-004  
**ClientSample ID:** 5368-12-25SA  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 4:40:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/24/2013 1839	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	06/22/2013 141	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/22/2013 141	MS
Boron	0.1	mg/L		0.1	EPA 200.7	06/24/2013 1839	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/22/2013 141	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/24/2013 1839	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/22/2013 141	MS
Iron	0.69	mg/L		0.05	EPA 200.7	06/24/2013 1839	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/22/2013 141	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/27/2013 1020	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/22/2013 141	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/24/2013 1839	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/22/2013 141	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/22/2013 141	MS
Uranium	0.0047	mg/L		0.0003	EPA 200.8	06/22/2013 141	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/22/2013 141	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/24/2013 1839	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2205	MS
<b>Metals - Total</b>							
Iron	1.13	mg/L		0.05	EPA 200.7	06/24/2013 1914	BK
Manganese	0.05	mg/L		0.02	EPA 200.7	06/24/2013 1914	BK

## These results apply only to the samples tested.

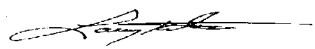
**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-004  
**ClientSample ID:** 5368-12-25SA  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 4:40:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	9.3	pCi/L		2	SM 7110B	07/23/2013 2304 SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	07/23/2013 2304 SH
Gross Beta	19.8	pCi/L		5	SM 7110B	07/23/2013 2304 SH
Gross Beta Precision (±)	3.0	pCi/L			SM 7110B	07/23/2013 2304 SH
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	07/08/2013 1626 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/08/2013 1626 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2013 2209 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2013 2209 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/08/2013 806 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/08/2013 806 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 759 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 759 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-003  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 9:30:00 AM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.76	s.u.			Field	06/18/2013 930
Conductivity	1394	µmhos/cm			Field	06/18/2013 930
Dissolved Oxygen	1.27	mg/L			Field	06/18/2013 930
Dissolved Oxygen (pct)	12.4	%			Field	06/18/2013 930
Turbidity	7.76	NTU			Field	06/18/2013 930
Temperature	14.4	°C			Field	06/18/2013 930
Oxygen Reduction Potential (ORP)	-2	mV			Field	06/18/2013 930
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	444	mg/L		5	SM 2320B	06/21/2013 2113 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	427	mg/L		5	SM 2320B	06/21/2013 2113 KV
Alkalinity, Carbonate as CO <sub>3</sub>	57	mg/L		5	SM 2320B	06/21/2013 2113 KV
Chloride	6	mg/L		1	EPA 300.0	06/22/2013 328 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	06/21/2013 2113 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/21/2013 1407 RH
Sulfate	213	mg/L		1	EPA 300.0	06/22/2013 328 AMB
Calcium	2	mg/L		1	EPA 200.7	06/21/2013 2126 DG
Magnesium	ND	mg/L		1	EPA 200.7	06/21/2013 2126 DG
Potassium	10	mg/L		1	EPA 200.7	06/21/2013 2126 DG
Sodium	333	mg/L		1	EPA 200.7	06/21/2013 2126 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1525 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	06/21/2013 2113 KV
Electrical Conductivity	1470	µmhos/cm		5	SM 2510B	06/21/2013 2113 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	06/20/2013 1203 JCG
<b>Data Quality</b>						
Cation Sum	14.81	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	13.51	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	4.57	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	830	mg/L		10	SM 1030E	06/27/2013 1437 LJK

These results apply only to the samples tested.

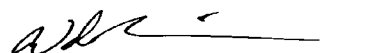
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-003  
**ClientSample ID:** 5268-21-110Z  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 9:30:00 AM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/21/2013 2126	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/20/2013 2134	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2134	MS
Boron	0.1	mg/L		0.1	EPA 200.7	06/21/2013 2126	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2134	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2126	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2134	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/21/2013 2126	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2134	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1217	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2134	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2126	DG
Selenium	0.008	mg/L		0.005	EPA 200.8	06/20/2013 2134	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2134	MS
Uranium	0.0290	mg/L		0.0003	EPA 200.8	06/20/2013 2134	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2134	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2126	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2004	MS
<b>Metals - Total</b>							
Iron	0.14	mg/L		0.05	EPA 200.7	06/24/2013 1658	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1658	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-003  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/18/2013 9:30:00 AM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	58.5	pCi/L		2	SM 7110B	07/16/2013 1653	SH
Gross Alpha Precision (±)	4.1	pCi/L			SM 7110B	07/16/2013 1653	SH
Gross Beta	19.0	pCi/L		3	SM 7110B	07/16/2013 1653	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	07/16/2013 1653	SH
Radium 226	1.7	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	07/03/2013 1336	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/18/2013 2356	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/18/2013 2356	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/02/2013 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/02/2013 813	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 1319	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 1319	MB

## These results apply only to the samples tested.

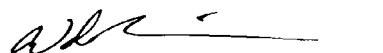
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-004  
**ClientSample ID:** 5268-21-11SM  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 9:00:00 AM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.33	s.u.			Field	06/19/2013 900
Conductivity	1396	µmhos/cm			Field	06/19/2013 900
Dissolved Oxygen	1.85	mg/L			Field	06/19/2013 900
Dissolved Oxygen (pct)	18.2	%			Field	06/19/2013 900
Turbidity	4.60	NTU			Field	06/19/2013 900
Temperature	13.7	°C			Field	06/19/2013 900
Oxygen Reduction Potential (ORP)	+25	mV			Field	06/19/2013 900
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	342	mg/L		5	SM 2320B	06/21/2013 2122 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	176	mg/L		5	SM 2320B	06/21/2013 2122 KV
Alkalinity, Carbonate as CO <sub>3</sub>	119	mg/L		5	SM 2320B	06/21/2013 2122 KV
Chloride	17	mg/L		1	EPA 300.0	06/22/2013 341 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	06/21/2013 2122 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	07/01/2013 1205 RH
Sulfate	252	mg/L		1	EPA 300.0	06/22/2013 341 AMB
Calcium	3	mg/L		1	EPA 200.7	06/21/2013 2128 DG
Magnesium	ND	mg/L		1	EPA 200.7	06/21/2013 2128 DG
Potassium	8	mg/L		1	EPA 200.7	06/21/2013 2128 DG
Sodium	302	mg/L		1	EPA 200.7	06/21/2013 2128 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1526 RH
<b>General Parameters</b>						
pH	9.9	s.u.		0.1	SM 4500 H B	06/21/2013 2122 KV
Electrical Conductivity	1440	µmhos/cm		5	SM 2510B	06/21/2013 2122 KV
Total Dissolved Solids (180)	830	mg/L		10	SM 2540	06/20/2013 1204 JCG
<b>Data Quality</b>						
Cation Sum	13.51	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	12.64	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	3.32	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	790	mg/L		10	SM 1030E	06/27/2013 1437 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-004  
**ClientSample ID:** 5268-21-11SM  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 9:00:00 AM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	06/21/2013 2128	DG
Arsenic	0.019	mg/L		0.005	EPA 200.8	06/20/2013 2139	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2139	MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/21/2013 2128	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2139	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2128	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2139	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/21/2013 2128	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2139	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1218	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2139	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2128	DG
Selenium	0.007	mg/L		0.005	EPA 200.8	06/20/2013 2139	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2139	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	06/20/2013 2139	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2139	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2128	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2034	MS
<b>Metals - Total</b>							
Iron	0.11	mg/L		0.05	EPA 200.7	06/24/2013 1700	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1700	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-004  
**ClientSample ID:** 5268-21-11SM  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 9:00:00 AM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	07/16/2013 1653 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/16/2013 1653 SH
Gross Beta	5.7	pCi/L		3	SM 7110B	07/16/2013 1653 SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	07/16/2013 1653 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/03/2013 1336 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/19/2013 257 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/19/2013 257 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/02/2013 813 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/02/2013 813 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 1319 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 1319 MB

## These results apply only to the samples tested.

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-001  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 12:45:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.89	s.u.			Field	06/20/2013 1245
Conductivity	1230	µmhos/cm			Field	06/20/2013 1245
Dissolved Oxygen	1.54	mg/L			Field	06/20/2013 1245
Dissolved Oxygen (pct)	15.3	%			Field	06/20/2013 1245
Turbidity	11.33	NTU			Field	06/20/2013 1245
Temperature	14.4	°C			Field	06/20/2013 1245
Oxygen Reduction Potential (ORP)	-111	mV			Field	06/20/2013 1245
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	420	mg/L		5	SM 2320B	06/24/2013 2139 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	354	mg/L		5	SM 2320B	06/24/2013 2139 KV
Alkalinity, Carbonate as CO <sub>3</sub>	78	mg/L		5	SM 2320B	06/24/2013 2139 KV
Chloride	4	mg/L		1	EPA 300.0	06/26/2013 1950 AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	06/24/2013 2139 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/25/2013 1241 RH
Sulfate	159	mg/L		1	EPA 300.0	06/26/2013 1950 AMB
Calcium	2	mg/L		1	EPA 200.7	06/24/2013 1832 DG
Magnesium	ND	mg/L		1	EPA 200.7	06/24/2013 1832 DG
Potassium	4	mg/L		1	EPA 200.7	06/24/2013 1832 DG
Sodium	286	mg/L		1	EPA 200.7	06/24/2013 1832 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	07/01/2013 1516 RH
<b>General Parameters</b>						
pH	9.4	s.u.		0.1	SM 4500 H B	06/24/2013 2139 KV
Electrical Conductivity	1300	µmhos/cm		5	SM 2510B	06/24/2013 2139 KV
Total Dissolved Solids (180)	760	mg/L		10	SM 2540	06/24/2013 1126 JCG
<b>Data Quality</b>						
Cation Sum	12.62	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Anion Sum	11.84	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Cation-Anion Balance (± 5%)	3.20	%		0.01	SM 1030E	07/03/2013 1350 JJ
Solids, Total Dissolved (Calc)	710	mg/L		10	SM 1030E	07/03/2013 1350 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Lacey Ketron, Water Lab Supervisor

Page 1 of 12



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-001  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 12:45:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/24/2013 1832	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/22/2013 115	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/22/2013 115	MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/24/2013 1832	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/22/2013 115	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/24/2013 1832	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/22/2013 115	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/24/2013 1832	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/22/2013 115	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/27/2013 1014	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/22/2013 115	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/24/2013 1832	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/22/2013 115	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/22/2013 115	MS
Uranium	0.0127	mg/L		0.0003	EPA 200.8	06/22/2013 115	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/22/2013 115	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/24/2013 1832	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2150	MS
<b>Metals - Total</b>							
Iron	0.30	mg/L		0.05	EPA 200.7	06/24/2013 1907	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1907	BK

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-001  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 12:45:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	25.1	pCi/L		2	SM 7110B	07/23/2013 932	SH
Gross Alpha Precision (±)	3.0	pCi/L			SM 7110B	07/23/2013 932	SH
Gross Beta	ND	pCi/L		4	SM 7110B	07/23/2013 932	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 932	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	07/08/2013 1406	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/08/2013 1406	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2013 600	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2013 600	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/03/2013 1227	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/03/2013 1227	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 1319	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 1319	MB

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-002  
**ClientSample ID:** 5268-12-01SM  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 1:00:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.81	s.u.			Field	06/20/2013 1300
Conductivity	1698	µmhos/cm			Field	06/20/2013 1300
Dissolved Oxygen	1.94	mg/L			Field	06/20/2013 1300
Dissolved Oxygen (pct)	20.0	%			Field	06/20/2013 1300
Turbidity	12.43	NTU			Field	06/20/2013 1300
Temperature	17.2	°C			Field	06/20/2013 1300
Oxygen Reduction Potential (ORP)	-136	mV			Field	06/20/2013 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	202	mg/L		5	SM 2320B	07/01/2013 1243 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	59	mg/L		5	SM 2320B	07/01/2013 1243 KV
Alkalinity, Carbonate as CO <sub>3</sub>	92	mg/L		5	SM 2320B	07/01/2013 1243 KV
Chloride	16	mg/L		1	EPA 300.0	07/01/2013 1922 AMB
Fluoride	1.7	mg/L		0.1	SM 4500FC	06/24/2013 2149 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/25/2013 1242 RH
Sulfate	481	mg/L		1	EPA 300.0	07/01/2013 1922 AMB
Calcium	2	mg/L		1	EPA 200.7	07/01/2013 1245 DG
Magnesium	ND	mg/L		1	EPA 200.7	07/01/2013 1245 DG
Potassium	8	mg/L		1	EPA 200.7	06/24/2013 1835 DG
Sodium	346	mg/L		1	EPA 200.7	07/01/2013 1245 DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	07/01/2013 1517 RH
<b>General Parameters</b>						
pH	10.2	s.u.		0.1	SM 4500 H B	06/24/2013 2149 KV
Electrical Conductivity	1800	µmhos/cm		5	SM 2510B	06/24/2013 2149 KV
Total Dissolved Solids (180)	1100	mg/L		10	SM 2540	06/24/2013 1127 JCG
<b>Data Quality</b>						
Cation Sum	15.41	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Anion Sum	14.60	meq/L		0.01	SM 1030E	07/03/2013 1350 JJ
Cation-Anion Balance (± 5%)	2.72	%		0.01	SM 1030E	07/03/2013 1350 JJ
Solids, Total Dissolved (Calc)	980	mg/L		10	SM 1030E	07/03/2013 1350 JJ

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-002  
**ClientSample ID:** 5268-12-01SM  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 1:00:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/24/2013 1835 DG
Arsenic	0.012	mg/L		0.005	EPA 200.8	06/22/2013 120 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/22/2013 120 MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/24/2013 1835 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/22/2013 120 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/24/2013 1835 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/22/2013 120 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/24/2013 1835 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/22/2013 120 MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/27/2013 1016 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/22/2013 120 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/24/2013 1835 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/22/2013 120 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/22/2013 120 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/22/2013 120 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/22/2013 120 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/24/2013 1835 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2155 MS
<b>Metals - Total</b>						
Iron	0.29	mg/L		0.05	EPA 200.7	06/24/2013 1910 BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1910 BK

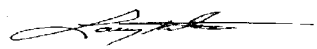
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/29/2013  
**Report ID** S1306354001

**ProjectName:** Kendrick  
**Lab ID:** S1306354-002  
**ClientSample ID:** 5268-12-01SM  
**COC:** 150408

**WorkOrder:** S1306354  
**CollectionDate:** 6/20/2013 1:00:00 PM  
**DateReceived:** 6/21/2013 10:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	07/23/2013 932	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 932	SH
Gross Beta	ND	pCi/L		8	SM 7110B	07/23/2013 932	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/23/2013 932	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/08/2013 1406	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/08/2013 1406	SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2013 901	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2013 901	MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/03/2013 1227	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/03/2013 1227	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251	SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/11/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/11/2013 759	MB

## These results apply only to the samples tested.

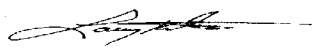
**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-005  
**ClientSample ID:** 5268-12-01SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 12:20:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.26	s.u.			Field	06/19/2013 1220
Conductivity	1318	µmhos/cm			Field	06/19/2013 1220
Dissolved Oxygen	1.31	mg/L			Field	06/19/2013 1220
Dissolved Oxygen (pct)	14.2	%			Field	06/19/2013 1220
Turbidity	14.53	NTU			Field	06/19/2013 1220
Temperature	18.5	°C			Field	06/19/2013 1220
Oxygen Reduction Potential (ORP)	+79	mV			Field	06/19/2013 1220
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	539	mg/L		5	SM 2320B	06/21/2013 2131 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	566	mg/L		5	SM 2320B	06/21/2013 2131 KV
Alkalinity, Carbonate as CO <sub>3</sub>	45	mg/L		5	SM 2320B	06/21/2013 2131 KV
Chloride	3	mg/L		1	EPA 300.0	06/22/2013 353 AMB
Fluoride	0.9	mg/L		0.1	SM 4500FC	06/21/2013 2131 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/21/2013 1414 RH
Sulfate	134	mg/L		1	EPA 300.0	06/22/2013 353 AMB
Calcium	3	mg/L		1	EPA 200.7	06/21/2013 2130 DG
Magnesium	1	mg/L		1	EPA 200.7	06/21/2013 2130 DG
Potassium	6	mg/L		1	EPA 200.7	06/21/2013 2130 DG
Sodium	334	mg/L		1	EPA 200.7	06/21/2013 2130 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	06/25/2013 1527 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	06/21/2013 2131 KV
Electrical Conductivity	1410	µmhos/cm		5	SM 2510B	06/21/2013 2131 KV
Total Dissolved Solids (180)	820	mg/L		10	SM 2540	06/20/2013 1205 JCG
<b>Data Quality</b>						
Cation Sum	14.94	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Anion Sum	13.70	meq/L		0.01	SM 1030E	06/27/2013 1437 LJK
Cation-Anion Balance (± 5%)	4.32	%		0.01	SM 1030E	06/27/2013 1437 LJK
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	06/27/2013 1437 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-005  
**ClientSample ID:** 5268-12-01SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 12:20:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	06/21/2013 2130	DG
Arsenic	0.012	mg/L		0.005	EPA 200.8	06/20/2013 2144	MS
Barium	ND	mg/L		0.5	EPA 200.8	06/20/2013 2144	MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/21/2013 2130	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/20/2013 2144	MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/21/2013 2130	DG
Copper	ND	mg/L		0.01	EPA 200.8	06/20/2013 2144	MS
Iron	ND	mg/L		0.05	EPA 200.7	06/21/2013 2130	DG
Lead	ND	mg/L		0.02	EPA 200.8	06/20/2013 2144	MS
Mercury	ND	mg/L		0.001	EPA 245.1	06/25/2013 1220	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/20/2013 2144	MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/21/2013 2130	DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/20/2013 2144	MS
Silver	ND	mg/L		0.003	EPA 200.8	06/20/2013 2144	MS
Uranium	0.0007	mg/L		0.0003	EPA 200.8	06/20/2013 2144	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/20/2013 2144	MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/21/2013 2130	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2013 2039	MS
<b>Metals - Total</b>							
Iron	0.53	mg/L		0.05	EPA 200.7	06/24/2013 1702	BK
Manganese	ND	mg/L		0.02	EPA 200.7	06/24/2013 1702	BK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 7/25/2013  
**Report ID:** S1306336001

**ProjectName:** Kendrick  
**Lab ID:** S1306336-005  
**ClientSample ID:** 5268-12-01SA  
**COC:** 150406 150407

**WorkOrder:** S1306336  
**CollectionDate:** 6/19/2013 12:20:00 PM  
**DateReceived:** 6/20/2013 12:39:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	2.4	pCi/L		2	SM 7110B	07/16/2013 1653 SH
Gross Alpha Precision (±)	1.2	pCi/L			SM 7110B	07/16/2013 1653 SH
Gross Beta	5.0	pCi/L		3	SM 7110B	07/16/2013 1653 SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	07/16/2013 1653 SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	07/03/2013 1336 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/03/2013 1336 SH
Radium 228	ND	pCi/L		1	Ga-Tech	07/19/2013 558 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/19/2013 558 MK
Thorium 230	ND	pCi/L		0.2	ACW10	07/02/2013 813 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/02/2013 813 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/15/2013 1251 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/15/2013 1251 SH
Thorium 230	ND	pCi/L		0.2	ACW10	07/09/2013 1319 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/09/2013 1319 MB

## These results apply only to the samples tested.

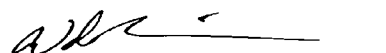
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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*X NO sample*  
**WWCENGINEERING**

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

## SAMPLING INFORMATION

Sampling Point 5367-34-06DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 8 / 1 / \_\_\_\_\_ Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 540 ft below MP Depth to Water (below MP) 84.71 ft Casing Diameter 5 in

Date 8/27/13 Time 1430 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

gp  
m

x 0.00223

cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water level only

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

K:\WWC\ADMIN\FORMS\Monitor Well Sample Form with DO and ORP.doc

## SAMPLING INFORMATION

Sampling Point 5367-34-060Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012/45-24  
Sample ID# 34-060Z Date Sampled 8/28/13 Time 0845 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 320 ft below MP Depth to Water (below MP) 66.03 ft Casing Diameter 5 in  
Date 8/27/13 Time 1430 am (pm) Casing Volume 254 x 3 = 762 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: rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0800									↓	30+
0830	9.51	1846	11.9	12.50					↓	30+
0845	9.48	1897	12.2	6.98	-64	3.63	33.8	—	1650	30+

Pumping Start Time 0750 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF  
CDC# 150179

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5367-34-06SM Project Kendrick  
Location 34-06SM W.O.# 2012145-24  
Sample ID# ~~2012145-24~~ Date Sampled 8/28/13 Time 0900 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 220 ft below MP Depth to Water (below MP) 59.35 ft Casing Diameter 5 in  
Date 8/27/13 Time 1435 am (pm) Casing Volume 161X3 = 483 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0810									↓	25
0820	9.89	1838	11.8	17.08					↓	25
0830	9.75	1843	12.1	19.21	-91	3.72	34.9	—	1250	25

Pumping Start Time 0750 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water slightly turbid - no odor

LCF

CO# 150179

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5367-34-06SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 34-06SA Date Sampled 8/19/13 Time 1230 am pm  
Describe Sampling Point GW monitoring well

Well Depth 55 ft below MP Depth to Water (below MP) 21.27 ft Casing Diameter 5 in  
Date 8/19/13 Time 1200 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump

Bladder

Tap

Bailer

Pump intake or bailer set at 50 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1220	8.39	1918	28.8	11.15	—	—	—	—	↓	150ml/305sec
1230	8.47	1983	23.0	3.98	-1	1.55	18.4	33.0	↓	

Pumping Start Time 1205 WL \_\_\_\_\_ Pumping End Time 1240 WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC # 150175

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



\* NO Sample

WWCENGINEERING

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

## SAMPLING INFORMATION

Sampling Point 5368-43-12 DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm

Describe Sampling Point GW monitoring well

Well Depth 780 ft below MP Depth to Water (below MP) 252.47 ft Casing Diameter 5 in

Date 8 / 27 / 13 Time 0740 am pm Casing Volume \_\_\_\_\_ g al

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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

K:\WWC\ADM\FORMS\Monitor Well Sample Form with DO and ORP.doc



## SAMPLING INFORMATION

Sampling Point 5368-43-120Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-120Z Date Sampled 8/27/13 Time 0930 am pm  
Describe Sampling Point GW monitoring well

Well Depth 615 ft below MP Depth to Water (below MP) 246.69 ft Casing Diameter 5 in  
Date 8/27/13 Time 0730 (am) pm Casing Volume 368x3 = 1105 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0815									↓	16.0
0915	9.72	2790	13.0	0.64					↓	16.0
0930	9.58	2990	13.3	0.30	-65	2.29	21.9		1440	16.0

Pumping Start Time 0800 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 150178

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-43-125M Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 43-125A Date Sampled 8/27/13 Time 0900 am pm

Describe Sampling Point GW monitoring well

Well Depth 480 ft below MP Depth to Water (below MP) 191.37 ft Casing Diameter 5 in

Date 8/27/13 Time 0735 (am) pm Casing Volume 288 x 3 = 864 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0820										15.0
0830	9.89	1699	12.5	4.83						15.0
0900	9.69	1778	12.8	2.62	-138	1.78	17.0		900	15.0

Pumping Start Time 0800 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 150178

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-33-14DM Project Kendrick  
 Location \_\_\_\_\_ W.O.# 201245-24  
 Sample ID# 5368-14DM Date Sampled 8/1 / 1 Time \_\_\_\_\_ am pm  
 Describe Sampling Point \_\_\_\_\_

Well Depth 910 ft below MP Depth to Water (below MP) 227.11 ft Casing Diameter 5 in  
 Date 8/26/13 Time 0940 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

gp  
m

x 0.00223

cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-33-140Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 33-140Z Date Sampled 8/26/13 Time 1130 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 760 ft below MP Depth to Water (below MP) 218.10 ft Casing Diameter 5 in  
Date 8/26/13 Time 0930 (am) pm Casing Volume 542x3 = 1626 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1010										20.0
1100	9.75	1419	14.2	2.66						20.0
1130	9.75	1533	14.3	2.65	-30	2.31	23.0		1800	20.0

Pumping Start Time 1000 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC# 150177

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-33-145M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 33-145M Date Sampled 8/26/13 Time 1300 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 630 ft below MP Depth to Water (below MP) 175.25 ft Casing Diameter 5 in  
Date 8/26/13 Time 0935 am pm Casing Volume 455 x 3  
1365 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: Submersible 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1020									120	12.0
1045									420	7.0
1200									945	1.0
1300	9.87	1422	15.0	1.99	-90	1.65	16.8	—	105	11.0

Pumping Start Time 1000 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC # 150177

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-33-14SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 33-14SA Date Sampled 8 / 21 / 13 Time 0940 am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 65 ft below MP Depth to Water (below MP) 31.07 ft Casing Diameter 5 in  
Date 8 / 21 / 13 Time 0852 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder

' Tap

' Bailer \_\_\_\_\_

Pump intake or bailer set at 60 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0925	8.17	808	20.4	9.11	—	—	—	—	↓	150 ml/30 sec
0940	8.20	823	19.5	4.37	-46	1.53	16.7	—	≈ 3.0	↓

Pumping Start Time 0910 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 150176

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_



*\*no sample*  
**WWCENGINEERING**

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## SAMPLING INFORMATION

Sampling Point 5368-41-23DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 41-23DM Date Sampled / / Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 940 ft below MP Depth to Water (below MP) 305.36 ft Casing Diameter 5 in

Date 8 / 26 / 13 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-230Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-230Z Date Sampled 8/26/13 Time 1730 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 800 ft below MP Depth to Water (below MP) 270.45 ft Casing Diameter 5 in  
Date 8/26/13 Time 1335 am ☒ pm Casing Volume 530x3 gal  
1590

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1420									200	10.0
1500									600	7.0
1700	9.48	1528	13.9	22.9					1440	7.0
1730	9.52	1515	15.1	23.7	-126	1.70	17.9		1650	7.0

Pumping Start Time 1400 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor

HCF

COC # 150177

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5368-41-235M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-235M Date Sampled 8/26/13 Time 1600 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 710 ft below MP Depth to Water (below MP) 236.13 ft Casing Diameter 5 in  
Date 8/26/13 Time 1340 am ☒ pm Casing Volume 474 x 3 = 1422 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1425</u>									<u>300</u>	<u>12.0</u>
<u>1530</u>	<u>9.39</u>	<u>1516</u>	<u>14.3</u>	<u>7.59</u>					<u>1080</u>	<u>10.0</u>
<u>1600</u>	<u>9.40</u>	<u>1469</u>	<u>14.4</u>	<u>6.14</u>	<u>-129</u>	<u>1.95</u>	<u>20.1</u>		<u>1480</u>	<u>10.0</u>

Pumping Start Time 1400 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 150177

Form completed by: Don Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-41-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-235A Date Sampled 8/21/13 Time 1100 am pm  
Describe Sampling Point GW monitoring well

Well Depth 90 ft below MP Depth to Water (below MP) 83.91 ft Casing Diameter 5 in  
Date 8/21/13 Time 1030 (am/pm) Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump

Bladder

Tap

Bailer

Pump intake or bailer set at 85 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1050	7.55	1200	21.0	22.4	—	—	—	—	—	150ml/30sec
1100	7.63	1195	20.2	16.45	+188	2.08	23.4	—	≈ 3.0	↓

Pumping Start Time 1035 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 150176

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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*\* NO sample*  
**WWCENGINEERING**

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## SAMPLING INFORMATION

Sampling Point 5368-24-12DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 2042 Date Sampled     /     /     Time     am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 900 ft below MP Depth to Water (below MP) 313.31 ft Casing Diameter 5 in

Date 8 / 27 / 13 Time 1020 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-24-120Z Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 24-120Z Date Sampled 8/27/13 Time 1315 am pm  
 Describe Sampling Point GW monitoring well

Well Depth 780 ft below MP Depth to Water (below MP) 308.45 ft Casing Diameter 5 in  
 Date 8/27/13 Time 1010 (am) pm Casing Volume 472 x 3 = 1416 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
 m  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1050										10.0
1245	9.60	1895	14.6	0.74						10.0
1315	9.53	1824	15.3	0.58	<del>1144</del> -45	2.17	22.2		1550	10.0

Pumping Start Time 1040 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 150178

Form completed by: Deed Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-24-12SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 24-12SM Date Sampled 8/27/13 Time 1220 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 600 ft below MP Depth to Water (below MP) 247.83 ft Casing Diameter 5 in  
Date 8/27/13 Time 1015 ☒ am pm Casing Volume 352 x 3 = 1056 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1100										11.0
1130	9.47	1437	13.9	80.2					↓	11.0
1220	9.48	1374	14.7	18.30	-87	2.15	21.6		1100	11.0

Pumping Start Time 1040 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 150178

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-24-125A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 24-125A Date Sampled 8/19/13 Time 1410 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 125 ft below MP Depth to Water (below MP) 79.41 ft Casing Diameter 5 in  
Date 8/19/13 Time 1330 am ☒ pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump

Bladder

Tap

Bailer

Pump intake or bailer set at 120 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1400	9.63	1121	23.6	9.37	—	—	—	—	↓	150ml/30sec.
1410	9.61	1100	22.2	5.68	-54	1.54	18.0	—	3.0	↓

Pumping Start Time 1340 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor

LCF

GOC # 150175

Form completed by: Bob Fulmer Witnessed by: \_\_\_\_\_



\* no sample

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## SAMPLING INFORMATION

Sampling Point 5368-43-24DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 750 ft below MP Depth to Water (below MP) 230.78 ft Casing Diameter 5 in  
Date 8 / 28 / 13 Time 0950 (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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-240Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-240Z Date Sampled 8/28/13 Time 1130 am pm  
Describe Sampling Point GW monitoring well

Well Depth 590 ft below MP Depth to Water (below MP) 236.76 ft Casing Diameter 5 in  
Date 8/28/13 Time 0940 (am) pm Casing Volume 353x3 gal  
1060

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1015</u>									↓	<u>15</u>
<u>1100</u>	<u>9.68</u>	<u>1877</u>	<u>13.6</u>	<u>72.5</u>					↓	<u>15</u>
<u>1130</u>	<u>9.62</u>	<u>1823</u>	<u>14.4</u>	<u>25.3</u>	<u>-82</u>	<u>2.51</u>	<u>25.3</u>	<u>—</u>	<u>1200</u>	<u>15</u>

Pumping Start Time 1010 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor

HCF

COC # 150179

Form completed by: Dod Sullen

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-245M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-245M Date Sampled 8/28/13 Time 1240 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 485 ft below MP Depth to Water (below MP) 145.77 ft Casing Diameter 5 in  
Date 8/28/13 Time 0945 am ☒ pm Casing Volume 340 x 3 = 1020 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1020	—	—	—	—	—	—	—	—	↓	7.0
1200	9.27	2010	13.7	5.64	—	—	—	—	↓	7.0
1240	9.28	1822	14.1	3.77	-160	1.48	15.0	—	1050	7.0

Pumping Start Time 1010 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor

LCF

COC# 150179

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-245A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-245A Date Sampled 8/22/13 Time 0845 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 45 ft below MP Depth to Water (below MP) 31.17 ft Casing Diameter 5 in  
Date 8/22/13 Time 0810 (am) pm Casing Volume \_\_\_\_\_ gal

At least NA bore volumes have been evacuated before sampling

Sampling method ' Submersible pump ' Bladder

' Tap ' Bailer \_\_\_\_\_

Pump intake or bailer set at 40 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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0830	8.24	888	14.3	7.44	—	—	—	—	↓	150 mL/30 sec
0845	8.30	842	14.5	6.27	+113	2.40	23.7	—	≈3.0	↓

Pumping Start Time 0815 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC# 150187

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



*\* No sample only*  
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 (307) 672-0761

## SAMPLING INFORMATION

Sampling Point 5368-32-23DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 1140 ft below MP Depth to Water (below MP) 371.87 ft Casing Diameter 5 in

Date 8 / 21 / 13 Time 1415 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

gp  
m

x 0.00223

cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-32-230Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 32-230Z Date Sampled 8/22/13 Time 1110 am pm  
Describe Sampling Point GW monitoring well

Well Depth 910 ft below MP Depth to Water (below MP) 358.15 ft Casing Diameter 5 in  
Date 8/21/13 Time 1400 am (pm) Casing Volume 552 x 3 = 1656 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0745	—	—	—	—	—	—	—	—	—	8.0
0940	9.77	1426	13.7	2.84	—	—	—	—	1040	8.0
1110	9.70	1431	14.3	1.15	-60	1.57	15.5	—	1680	8.0

Pumping Start Time 0730 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC# 150187

Form completed by: Rod Fulk Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-32-235M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 32-235M Date Sampled 8/22/13 Time 1030 (am) pm  
Describe Sampling Point GW monitoring well

Well Depth 750 ft below MP Depth to Water (below MP) 318.66 ft Casing Diameter 5 in  
Date 8/22/13 Time 1405 am (pm) Casing Volume 431 x 3 gal  
1293

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0750	_____	_____	_____	_____	_____	_____	_____	_____	_____	8.5
0950	9.82	1481	13.2	0.85	_____	_____	_____	_____	1275	8.0
1030	9.79	1486	13.5	1.29	-118	1.65	16.3	_____	1595	8.0

Pumping Start Time 0730 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC # 150187

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



WWCENGINEERING

\* no sample

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## SAMPLING INFORMATION

Sampling Point 5368-32-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled / / Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 130 ft below MP Depth to Water (below MP) 127.85 ft Casing Diameter 5 in  
Date 8 / 21 / 13 Time 1410 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - not enough water to sample

Form completed by: \_\_\_\_\_

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-36DM Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# \_\_\_\_\_ Date Sampled 1-1-13 Time \_\_\_\_\_ am pm  
 Describe Sampling Point GW monitoring well

Well Depth 1020 ft below MP Depth to Water (below MP) 387.54 ft Casing Diameter 5 in  
 Date 8 / 23 / 13 Time 0740 am pm Casing Volume \_\_\_\_\_ g al

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

\_\_\_\_\_ gp m  
 x 0.00223  
 \_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water level only

Form completed by: Paul Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-360Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-360Z Date Sampled 8 / 23 / 13 Time 1140 am pm  
Describe Sampling Point GW monitoring well

Well Depth 720 ft below MP Depth to Water (below MP) 361.70 ft Casing Diameter 5 in  
Date 8 / 23 / 13 Time 0730 am pm Casing Volume 358x3 = 1074 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>0820</u>										<u>5.0</u>
<u>1000</u>	<u>9.48</u>	<u>1504</u>	<u>14.2</u>	<u>3.77</u>					<u>600</u>	<u>5.0</u>
<u>1140</u>	<u>9.45</u>	<u>1498</u>	<u>14.4</u>	<u>1.53</u>	<u>-102</u>	<u>1.85</u>	<u>18.3</u>		<u>1100</u>	<u>5.0</u>

Pumping Start Time 0800 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 150186

Form completed by: And Fuller Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5368-41-365M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-365M Date Sampled 8/23/13 Time 1240 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 585 ft below MP Depth to Water (below MP) 319.83 ft Casing Diameter 5 in  
Date 8/23/13 Time 0735 ☒ am pm Casing Volume 265 x 3 = 795 gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

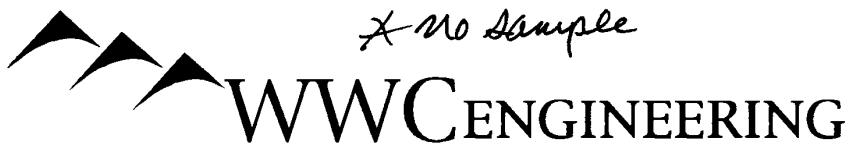
## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0830										7.0
0835	- Ran out of water - let recharge									
1030	- Started pump									7.0
1054	- Ran out of water - let recharge									
1230	- Started pump -									7.0
1240	10.08	1495	13.2	261	-50	1.52	14.5			

Pumping Start Time 0800 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Low producing well - pumped water until well ran out of water twice and sampled on 3rd drawdown  
HCF, COC # 150186

Form completed by: Garret Andler Witnessed by: \_\_\_\_\_



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## SAMPLING INFORMATION

Sampling Point 5368-41-365A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 120 ft below MP Depth to Water (below MP) Dry ft Casing Diameter \_\_\_\_\_ in  
Date 8/23/13 Time 0745 (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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: well is dry!

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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\* No Sample

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## SAMPLING INFORMATION

Sampling Point 5368 - 31 - 35 DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# — Date Sampled    /    /    Time    am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 1200 ft below MP Depth to Water (below MP) 445.17 ft Casing Diameter 5 in

Date 8 / 20 / 13 Time 0820 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-31-350Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-350Z Date Sampled 8/20/13 Time 1130 am pm  
Describe Sampling Point GW monitoring well

Well Depth 990 ft below MP Depth to Water (below MP) 446.71 ft Casing Diameter 5 in  
Date 8/20/13 Time 0800 am pm Casing Volume 543x3 gal  
1639

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>0850</u>									↓	<u>10.0</u>
<u>1020</u>	<u>9.61</u>	<u>1384</u>	<u>14.8</u>	<u>7.19</u>					↓	<u>10.00</u>
<u>1130</u>	<u>9.58</u>	<u>1379</u>	<u>16.0</u>	<u>7.34</u>	<u>+4</u>	<u>1.70</u>	<u>17.6</u>	<u>—</u>	<u>1800</u>	<u>10.00</u>

Pumping Start Time 0830 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - fizzy - no odor

LCF

COC # 150175

Form completed by: Bob Fulmer

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-31-355M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-355M Date Sampled 8 / 20 / 13 Time 1600 am pm  
Describe Sampling Point 6W Monitoring Well

Well Depth 875 ft below MP Depth to Water (below MP) 435.58 ft Casing Diameter 5 in  
Date 8 / 20 / 13 Time 0805 (am) pm Casing Volume 439 x 3 gal  
1317

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump  
Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0900										3.0
1030	10.32	1327	15.2	32.1					360	2.5
1510	9.80	1499	15.2	3.70					1060	2.5
1600	9.82	1492	16.0	3.04	-61	1.58	16.4		1185	2.5

Pumping Start Time 0830 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: no 3 bore volumes, but sampled based on constant field parameters.  
LCF - COC # 150188

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-31-35SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-35SA Date Sampled 8/20/13 Time 1000 am pm  
Describe Sampling Point GW monitoring well

Well Depth 130 ft below MP Depth to Water (below MP) 102.79 ft Casing Diameter 5 in  
Date 8/20/13 Time 0905 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump Bladder

Tap Bailer \_\_\_\_\_

Pump intake or bailer set at 125 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223 \_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0945	9.36	1350	21.0	37.8	—	—	—	—	↓	150 mL/30 sec.
1000	9.43	1362	22.4	32.1	+23	1.54	18.0	—	3.0	↓

Pumping Start Time 0930 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor

HCF

COC # 150175

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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# WWCENGINEERING

*\* no sample*

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## SAMPLING INFORMATION

Sampling Point 5368-12-25 DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled / / Time \_\_\_\_\_ am pm

Describe Sampling Point GW monitoring well

Well Depth 1180 ft below MP Depth to Water (below MP) 389.06 ft Casing Diameter 5 in

Date 8 '22 '13 Time 1150 (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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water level only

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-12-250Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-250Z Date Sampled 8 / 22 / 13 Time 1620 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 890 ft below MP Depth to Water (below MP) 382.73 ft Casing Diameter 5 in  
Date 8 / 22 / 13 Time 1140 ☒ am pm Casing Volume 507 x 3 = 1521 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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1220									120	6.0
1420	9.56	1390	15.0	39.6					840	6.0
1620	9.52	1327	15.0	12.69	-34	1.86	18.6		1560	6.0

Pumping Start Time 1200 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 150187

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-12-255M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-255M Date Sampled 8/22/13 Time 1645 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 790 ft below MP Depth to Water (below MP) 375.83 ft Casing Diameter 5 in  
Date 8/22/13 Time 1145 ☒ am ☐ pm Casing Volume 414 x 3 gal  
1242

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1230	—	—	—	—	—	—	—	—	180	6.0
1430	10.02	1302	14.6	119	—	—	—	—	900	3.0
1645	9.91	1299	15.1	37.1	-110	1.48	14.7	—	1305	3.0

Pumping Start Time 1200 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor  
HCF

COC # 150187

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-12-25 Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 12-25SA Date Sampled 8/21/13 Time 1600 am ☒ pm  
 Describe Sampling Point GW monitoring well

Well Depth 100 ft below MP Depth to Water (below MP) 68.27 ft Casing Diameter 5 in  
 Date 8/21/13 Time 1515 am ☒ pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump

Bladder

Tap

Bailer

Pump intake or bailer set at 95 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
 m  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1545	8.03	1329	23.3	24.8	—	—	—	—	↓	150ml/30sec
1600	8.15	1366	20.6	13.22	-133	1.39	15.9	—	~3.0	↓

Pumping Start Time 1530 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water slightly turbid - no odor

LCF

COC#

Form completed by: Red Fuller Witnessed by: \_\_\_\_\_



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

## SAMPLING INFORMATION

Sampling Point 5268-21-11DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012/45-24

Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 1200 ft below MP Depth to Water (below MP) 392.60 ft Casing Diameter 5 in

Date 8 / 19 / 13 Time 1015 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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: \_\_\_\_\_ Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-21-110Z Project Strata/Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 21-110Z Date Sampled 8/19/13 Time 1600 am ☒ pm  
Describe Sampling Point Groundwater monitoring well

Well Depth 1025 ft below MP Depth to Water (below MP) 415.35 ft Casing Diameter 5 in  
Date 8/19/13 Time 1000 ☒ am ☐ pm Casing Volume 610X3 = 1830 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: Rubber 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 N/A

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1040	—	—	—	—	—	—	—	—	—	3.0
1500	9.78	1382	15.4	36.6	—	—	—	—	870	3.0
1600	9.76	1385	15.5	18.96	-39	2.20	23.2	—	1020	3.0

Pumping Start Time 1030 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No 3 bore volumes pumped but sampled based on constant field parameters  
LCF - COC# 150175

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-21-115M Project Kendrick  
Location \_\_\_\_\_ W.O.# \_\_\_\_\_  
Sample ID# 21-115M Date Sampled 8/19/13 Time 1530 am pm  
Describe Sampling Point GW monitoring well

Well Depth 850 ft below MP Depth to Water (below MP) 347.05 ft Casing Diameter 5 in  
Date 8/19/13 Time 1010 am pm Casing Volume 503 x 3 gal  
1510 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: Rubber 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 W/A

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1050</u>	_____	_____	_____	_____	_____	_____	_____	_____	_____	<u>5.0</u>
<u>1500</u>	<u>9.95</u>	<u>1280</u>	<u>14.7</u>	<u>3.65</u>	_____	_____	_____	_____	<u>1350</u>	<u>5.0</u>
<u>1530</u>	<u>9.97</u>	<u>1287</u>	<u>15.1</u>	<u>3.53</u>	<u>-28</u>	<u>1.35</u>	<u>14.0</u>	_____	<u>1500</u>	<u>5.0</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Pumping Start Time 1020 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

CDC#

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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# WWCENGINEERING

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

## SAMPLING INFORMATION

Sampling Point 5268-21-115A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012  
Sample ID# 21-115A Date Sampled 8/19/13 Time \_\_\_\_\_ am pm  
Describe Sampling Point 6W monitoring well

Well Depth 75 ft below MP Depth to Water (below MP) 52.58 ft Casing Diameter 5 in  
Date 8/19/13 Time 1110 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method ' Submersible pump

Bladder

' Tap

' Bailer \_\_\_\_\_

Pump intake or bailer set at 70 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample due to very high pH

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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*\* No Sample*  
**WWCENGINEERING**

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

## SAMPLING INFORMATION

Sampling Point 5268-12-01 DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 1050 ft below MP Depth to Water (below MP) 325.53 ft Casing Diameter 5 in

Date 8/21/13 Time 0750 (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

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water level only

Form completed by: \_\_\_\_\_ Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-12-010Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-010Z Date Sampled 8/21/13 Time 1230 am pm  
Describe Sampling Point GW monitoring well

Well Depth 845 ft below MP Depth to Water (below MP) 329.92 ft Casing Diameter 5 in  
Date 8/21/13 Time 0735 am pm Casing Volume 515 x 3 gal  
1545

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: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0825									↓	8.0
1210	9.91	1233	15.0	8.69					↓	8.0
1230	9.92	1239	15.0	6.77	-22	2.47	25.1		2080	8.0

Pumping Start Time 0810 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 150176

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-12-015M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-015M Date Sampled 8/21/13 Time 1300 am ☒ pm  
Describe Sampling Point GW Monitoring Well

Well Depth 715 ft below MP Depth to Water (below MP) 320.33 ft Casing Diameter 5 in  
Date 8/21/13 Time 0740 am pm Casing Volume \_\_\_\_\_ gal

At least NA bore volumes have been evacuated before sampling

Sampling method Submersible pump

Tap

Bailer

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0830										6.0
1200	10.71	1782	17.5	7.73						0.5
1300	10.62	1756	18.7	4.41	-59	1.62	17.3			0.25

Pumping Start Time 0810 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: NO 3 bore volumes pumped, but sampled based on consistent field par.  
LCF, LOC# 150176

Form completed by: Paul Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-12-015A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012144-24  
Sample ID# 12-015A Date Sampled 8/20/13 Time 1420 am pm  
Describe Sampling Point GW Monitoring well

Well Depth 95 ft below MP Depth to Water (below MP) 54.05 ft Casing Diameter 5 in  
Date 8/20/13 Time 1340 am (pm) Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method ' Submersible pump

Bladder

' Tap

' Bailer \_\_\_\_\_

Pump intake or bailer set at 90 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1410	9.28	1315	22.5	11.49	_____	_____	_____	_____	↓	150ML/30sec
1420	9.32	1305	23.9	13.20	+61	1.50	18.3	—	↓ 3.0	↓

Pumping Start Time 1355 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC# 150188

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-001  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 8:45:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.48	s.u.			Field	08/28/2013 845
Conductivity	1897	µmhos/cm			Field	08/28/2013 845
Dissolved Oxygen	3.63	mg/L			Field	08/28/2013 845
Dissolved Oxygen (pct)	33.8	%			Field	08/28/2013 845
Turbidity	6.98	NTU			Field	08/28/2013 845
Temperature	12.2	°C			Field	08/28/2013 845
Oxygen Reduction Potential (ORP)	-64	mV			Field	08/28/2013 845
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	592	mg/L		5	SM 2320B	08/29/2013 1710 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	650	mg/L		5	SM 2320B	08/29/2013 1710 KV
Alkalinity, Carbonate as CO <sub>3</sub>	35	mg/L		5	SM 2320B	08/29/2013 1710 KV
Chloride	8	mg/L		1	EPA 300.0	08/29/2013 1754 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	08/29/2013 1710 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1215 RH
Sulfate	358	mg/L		1	EPA 300.0	08/29/2013 1754 AMB
Calcium	4	mg/L		1	EPA 200.7	08/29/2013 1346 BK
Magnesium	2	mg/L		1	EPA 200.7	08/29/2013 1346 BK
Potassium	7	mg/L		1	EPA 200.7	08/29/2013 1346 BK
Sodium	437	mg/L		1	EPA 200.7	08/29/2013 1346 BK
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	09/03/2013 1352 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	08/29/2013 1710 KV
Electrical Conductivity	1870	µmhos/cm		5	SM 2510B	08/29/2013 1710 KV
Total Dissolved Solids (180)	1240	mg/L		10	SM 2540	08/29/2013 1134 EC
<b>Data Quality</b>						
Cation Sum	19.54	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Anion Sum	19.55	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Cation-Anion Balance (± 5%)	ND	%		0.01	SM 1030E	09/06/2013 1231 JJ
Solids, Total Dissolved (Calc)	1170	mg/L		10	SM 1030E	09/06/2013 1231 JJ

## These results apply only to the samples tested.

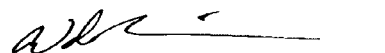
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-001  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 8:45:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/29/2013 1346	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	08/29/2013 1549	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1549	MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/29/2013 1346	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1549	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/29/2013 1346	BK
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1549	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/29/2013 1346	BK
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1549	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 914	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1549	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/29/2013 1346	BK
Selenium	ND	mg/L		0.005	EPA 200.8	08/29/2013 1549	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1549	MS
Uranium	0.0120	mg/L		0.0003	EPA 200.8	08/29/2013 1549	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1549	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/29/2013 1346	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 410	MS
<b>Metals - Total</b>							
Iron	0.29	mg/L		0.05	EPA 200.7	08/30/2013 1733	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1733	DG

## These results apply only to the samples tested.

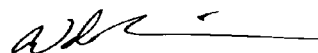
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

Page 2 of 12



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-001  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 8:45:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	27.9	pCi/L		3	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	4.0	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	ND	pCi/L		7	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	1.8	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 1058	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	09/17/2013 1058	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/15/2013 1256	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/15/2013 1256	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202	MB

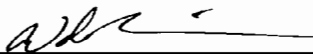
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-002  
**ClientSample ID:** 5367-34-06SM  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 9:00:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.75	s.u.			Field	08/28/2013 900
Conductivity	1843	µmhos/cm			Field	08/28/2013 900
Dissolved Oxygen	3.72	mg/L			Field	08/28/2013 900
Dissolved Oxygen (pct)	34.9	%			Field	08/28/2013 900
Turbidity	19.21	NTU			Field	08/28/2013 900
Temperature	12.1	°C			Field	08/28/2013 900
Oxygen Reduction Potential (ORP)	-91	mV			Field	08/28/2013 900
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	593	mg/L		5	SM 2320B	08/29/2013 1723 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	609	mg/L		5	SM 2320B	08/29/2013 1723 KV
Alkalinity, Carbonate as CO <sub>3</sub>	56	mg/L		5	SM 2320B	08/29/2013 1723 KV
Chloride	5	mg/L		1	EPA 300.0	08/29/2013 1808 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	08/29/2013 1723 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1216 RH
Sulfate	335	mg/L		1	EPA 300.0	08/29/2013 1808 AMB
Calcium	2	mg/L		1	EPA 200.7	08/29/2013 1349 BK
Magnesium	1	mg/L		1	EPA 200.7	08/29/2013 1349 BK
Potassium	19	mg/L		1	EPA 200.7	08/29/2013 1349 BK
Sodium	402	mg/L		1	EPA 200.7	08/29/2013 1349 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	09/03/2013 1353 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	08/29/2013 1723 KV
Electrical Conductivity	1810	µmhos/cm		5	SM 2510B	08/29/2013 1723 KV
Total Dissolved Solids (180)	1190	mg/L		10	SM 2540	08/29/2013 1135 EC
<b>Data Quality</b>						
Cation Sum	18.17	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Anion Sum	18.98	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Cation-Anion Balance (± 5%)	2.17	%		0.01	SM 1030E	09/06/2013 1231 JJ
Solids, Total Dissolved (Calc)	1120	mg/L		10	SM 1030E	09/06/2013 1231 JJ

## These results apply only to the samples tested.

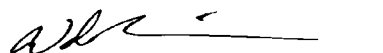
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-002  
**ClientSample ID:** 5367-34-06SM  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 9:00:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/29/2013 1349	BK
Arsenic	0.010	mg/L		0.005	EPA 200.8	08/29/2013 1610	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1610	MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/29/2013 1349	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1610	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/29/2013 1349	BK
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1610	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/29/2013 1349	BK
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1610	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 922	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1610	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/29/2013 1349	BK
Selenium	ND	mg/L		0.005	EPA 200.8	08/29/2013 1610	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1610	MS
Uranium	0.0024	mg/L		0.0003	EPA 200.8	08/29/2013 1610	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1610	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/29/2013 1349	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 427	MS
<b>Metals - Total</b>							
Iron	0.51	mg/L		0.05	EPA 200.7	08/30/2013 1742	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1742	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-002  
**ClientSample ID:** 5367-34-06SM  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 9:00:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.1	pCi/L		4	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	2.6	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	16.3	pCi/L		6	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	3.8	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 1058	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/17/2013 1058	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/15/2013 1557	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/15/2013 1557	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-001  
**ClientSample ID:** 5367-34-06SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 12:30:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.47	s.u.			Field	08/19/2013 1230
Conductivity	1983	µmhos/cm			Field	08/19/2013 1230
Dissolved Oxygen	1.55	mg/L			Field	08/19/2013 1230
Dissolved Oxygen (pct)	18.4	%			Field	08/19/2013 1230
Turbidity	3.98	NTU			Field	08/19/2013 1230
Temperature	23.0	°C			Field	08/19/2013 1230
Oxygen Reduction Potential (ORP)	-1	mV			Field	08/19/2013 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	662	mg/L		5	SM 2320B	08/27/2013 1708 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	778	mg/L		5	SM 2320B	08/27/2013 1708 KV
Alkalinity, Carbonate as CO <sub>3</sub>	15	mg/L		5	SM 2320B	08/27/2013 1708 KV
Chloride	7	mg/L		1	EPA 300.0	08/28/2013 1158 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/22/2013 2103 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1304 RH
Sulfate	405	mg/L		1	EPA 300.0	08/28/2013 1158 AMB
Calcium	14	mg/L		1	EPA 200.7	08/28/2013 1825 DG
Magnesium	8	mg/L		1	EPA 200.7	08/28/2013 1825 DG
Potassium	10	mg/L		1	EPA 200.7	08/28/2013 1825 DG
Sodium	471	mg/L		1	EPA 200.7	08/28/2013 1825 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1158 RH
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	08/22/2013 2103 KV
Electrical Conductivity	2030	µmhos/cm		5	SM 2510B	08/22/2013 2103 KV
Total Dissolved Solids (180)	1380	mg/L		10	SM 2540	08/23/2013 708 EC
<b>Data Quality</b>						
Cation Sum	22.12	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	21.88	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	0.54	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	1310	mg/L		10	SM 1030E	08/30/2013 1400 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-001  
**ClientSample ID:** 5367-34-06SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 12:30:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1435	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/22/2013 1956	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 1956	MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/23/2013 1435	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 1956	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1435	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 1956	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/23/2013 1435	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 1956	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1148	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 1956	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1435	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/22/2013 1956	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 1956	MS
Uranium	0.0012	mg/L		0.0003	EPA 200.8	08/22/2013 1956	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 1956	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1435	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2153	MS
<b>Metals - Total</b>							
Iron	0.12	mg/L		0.05	EPA 200.7	08/23/2013 1839	DG
Manganese	0.08	mg/L		0.02	EPA 200.7	08/23/2013 1839	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-001  
**ClientSample ID:** 5367-34-06SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 12:30:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		4	SM 7110B	09/12/2013 810 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/12/2013 810 SH
Gross Beta	ND	pCi/L		7	SM 7110B	09/12/2013 810 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/12/2013 810 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1721 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	08/28/2013 1721 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/04/2013 859 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/04/2013 859 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1600 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1600 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/08/2013 1414 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/08/2013 1414 MB

## These results apply only to the samples tested.

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-002  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 9:30:00 AM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.58	s.u.			Field	08/27/2013 930
Conductivity	2990	µmhos/cm			Field	08/27/2013 930
Dissolved Oxygen	2.29	mg/L			Field	08/27/2013 930
Dissolved Oxygen (pct)	21.9	%			Field	08/27/2013 930
Turbidity	0.30	NTU			Field	08/27/2013 930
Temperature	13.3	°C			Field	08/27/2013 930
Oxygen Reduction Potential (ORP)	-65	mV			Field	08/27/2013 930
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	547	mg/L		5	SM 2320B	09/05/2013 1644 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	595	mg/L		5	SM 2320B	09/05/2013 1644 KV
Alkalinity, Carbonate as CO <sub>3</sub>	36	mg/L		5	SM 2320B	09/05/2013 1644 KV
Chloride	9	mg/L		1	EPA 300.0	08/29/2013 2326 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	08/29/2013 1900 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1145 RH
Sulfate	844	mg/L		1	EPA 300.0	08/29/2013 2326 AMB
Calcium	4	mg/L		1	EPA 200.7	08/30/2013 1206 DG
Magnesium	2	mg/L		1	EPA 200.7	08/30/2013 1206 DG
Potassium	12	mg/L		1	EPA 200.7	09/06/2013 1307 DG
Sodium	685	mg/L		1	EPA 200.7	09/06/2013 1307 DG
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	09/03/2013 1318 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	08/29/2013 1900 KV
Electrical Conductivity	2710	µmhos/cm		5	SM 2510B	08/29/2013 1900 KV
Total Dissolved Solids (180)	1860	mg/L		10	SM 2540	08/29/2013 1140 EC
<b>Data Quality</b>						
Cation Sum	30.49	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Anion Sum	28.79	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Cation-Anion Balance (± 5%)	2.86	%		0.01	SM 1030E	09/09/2013 1114 JJ
Solids, Total Dissolved (Calc)	1880	mg/L		10	SM 1030E	09/09/2013 1114 JJ

These results apply only to the samples tested.

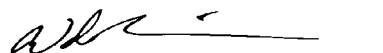
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-002  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 9:30:00 AM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/30/2013 1206	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/29/2013 1654	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1654	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/30/2013 1206	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1654	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/30/2013 1206	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1654	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/30/2013 1206	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1654	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 934	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1654	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/30/2013 1206	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/29/2013 1654	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1654	MS
Uranium	0.0168	mg/L		0.0003	EPA 200.8	08/29/2013 1654	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1654	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/30/2013 1206	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 449	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	08/30/2013 1759	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1759	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-002  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 9:30:00 AM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	43.0	pCi/L		4	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	5.1	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	13.7	pCi/L		7	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	0.7	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/17/2013 853	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/15/2013 352	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/15/2013 352	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 751	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 751	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/18/2013 736	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/18/2013 736	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-001  
**ClientSample ID:** 5368-43-12SM  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 9:00:00 AM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.69	s.u.			Field	08/27/2013 900
Conductivity	1778	µmhos/cm			Field	08/27/2013 900
Dissolved Oxygen	1.78	mg/L			Field	08/27/2013 900
Dissolved Oxygen (pct)	17.0	%			Field	08/27/2013 900
Turbidity	2.62	NTU			Field	08/27/2013 900
Temperature	12.8	°C			Field	08/27/2013 900
Oxygen Reduction Potential (ORP)	-138	mV			Field	08/27/2013 900
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	534	mg/L		5	SM 2320B	08/29/2013 1848 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	559	mg/L		5	SM 2320B	08/29/2013 1848 KV
Alkalinity, Carbonate as CO <sub>3</sub>	46	mg/L		5	SM 2320B	08/29/2013 1848 KV
Chloride	4	mg/L		1	EPA 300.0	08/29/2013 2312 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	08/29/2013 1848 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1143 RH
Sulfate	338	mg/L		1	EPA 300.0	08/29/2013 2312 AMB
Calcium	2	mg/L		1	EPA 200.7	08/30/2013 1152 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/30/2013 1152 DG
Potassium	15	mg/L		1	EPA 200.7	08/30/2013 1152 DG
Sodium	412	mg/L		1	EPA 200.7	08/30/2013 1152 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	09/03/2013 1317 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	08/29/2013 1848 KV
Electrical Conductivity	1730	µmhos/cm		5	SM 2510B	08/29/2013 1848 KV
Total Dissolved Solids (180)	1130	mg/L		10	SM 2540	08/29/2013 1139 EC
<b>Data Quality</b>						
Cation Sum	18.45	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Anion Sum	17.88	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Cation-Anion Balance (± 5%)	1.56	%		0.01	SM 1030E	09/09/2013 1114 JJ
Solids, Total Dissolved (Calc)	1090	mg/L		10	SM 1030E	09/09/2013 1114 JJ

These results apply only to the samples tested.

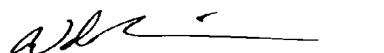
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-001  
**ClientSample ID:** 5368-43-12SM  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 9:00:00 AM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/30/2013 1152	DG
Arsenic	0.008	mg/L		0.005	EPA 200.8	08/29/2013 1648	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1648	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/30/2013 1152	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1648	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/30/2013 1152	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1648	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/30/2013 1152	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1648	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 932	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1648	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/30/2013 1152	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/29/2013 1648	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1648	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/29/2013 1648	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1648	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/30/2013 1152	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 443	MS
<b>Metals - Total</b>							
Iron	0.14	mg/L		0.05	EPA 200.7	08/30/2013 1756	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1756	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-001  
**ClientSample ID:** 5368-43-12SM  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 9:00:00 AM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.3	pCi/L		3	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	13.5	pCi/L		6	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	3.7	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/17/2013 853	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/15/2013 051	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/15/2013 051	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 751	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 751	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/18/2013 736	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/18/2013 736	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-001  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 11:30:00 AM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.75	s.u.			Field	08/26/2013 1130
Conductivity	1533	µmhos/cm			Field	08/26/2013 1130
Dissolved Oxygen	2.31	mg/L			Field	08/26/2013 1130
Dissolved Oxygen (pct)	23.0	%			Field	08/26/2013 1130
Turbidity	2.65	NTU			Field	08/26/2013 1130
Temperature	14.3	°C			Field	08/26/2013 1130
Oxygen Reduction Potential (ORP)	-30	mV			Field	08/26/2013 1130
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	476	mg/L		5	SM 2320B	08/28/2013 1731 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	482	mg/L		5	SM 2320B	08/28/2013 1731 KV
Alkalinity, Carbonate as CO <sub>3</sub>	49	mg/L		5	SM 2320B	08/28/2013 1731 KV
Chloride	5	mg/L		1	EPA 300.0	08/28/2013 2022 AMB
Fluoride	1.3	mg/L		0.1	SM 4500FC	08/28/2013 1731 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1203 RH
Sulfate	258	mg/L		1	EPA 300.0	08/28/2013 2022 AMB
Calcium	2	mg/L		1	EPA 200.7	08/28/2013 1950 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 1950 DG
Potassium	7	mg/L		1	EPA 200.7	08/28/2013 1950 DG
Sodium	363	mg/L		1	EPA 200.7	08/28/2013 1950 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	09/03/2013 1347 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	08/28/2013 1731 KV
Electrical Conductivity	1670	µmhos/cm		5	SM 2510B	08/28/2013 1731 KV
Total Dissolved Solids (180)	980	mg/L		10	SM 2540	08/28/2013 1020 EC
<b>Data Quality</b>						
Cation Sum	16.05	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Anion Sum	15.11	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Cation-Anion Balance (± 5%)	3.01	%		0.01	SM 1030E	09/05/2013 833 JJ
Solids, Total Dissolved (Calc)	920	mg/L		10	SM 1030E	09/05/2013 833 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-001  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 11:30:00 AM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/28/2013 1950	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/28/2013 1441	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/28/2013 1441	MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/28/2013 1950	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/28/2013 1441	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/28/2013 1950	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/28/2013 1441	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/28/2013 1950	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/28/2013 1441	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/29/2013 1138	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/28/2013 1441	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/28/2013 1950	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/28/2013 1441	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/28/2013 1441	MS
Uranium	0.0165	mg/L		0.0003	EPA 200.8	08/28/2013 1441	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/28/2013 1441	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/28/2013 1950	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 333	MS
<b>Metals - Total</b>							
Iron	0.06	mg/L		0.05	EPA 200.7	08/29/2013 1500	BK
Manganese	ND	mg/L		0.02	EPA 200.7	08/29/2013 1500	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-001  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 11:30:00 AM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	30.2	pCi/L		3	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	3.4	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	9.1	pCi/L		4	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	0.8	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/17/2013 853	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/14/2013 1247	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/14/2013 1247	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/13/2013 1156	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/13/2013 1156	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 933	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 933	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/16/2013 754	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/16/2013 754	MB

## These results apply only to the samples tested.

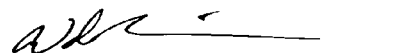
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-002  
**ClientSample ID:** 5368-33-14SM  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 1:00:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.87	s.u.			Field	08/26/2013 1300
Conductivity	1422	µmhos/cm			Field	08/26/2013 1300
Dissolved Oxygen	1.65	mg/L			Field	08/26/2013 1300
Dissolved Oxygen (pct)	16.8	%			Field	08/26/2013 1300
Turbidity	1.99	NTU			Field	08/26/2013 1300
Temperature	15.0	°C			Field	08/26/2013 1300
Oxygen Reduction Potential (ORP)	-90	mV			Field	08/26/2013 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	515	mg/L		5	SM 2320B	08/28/2013 1740 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	481	mg/L		5	SM 2320B	08/28/2013 1740 KV
Alkalinity, Carbonate as CO <sub>3</sub>	73	mg/L		5	SM 2320B	08/28/2013 1740 KV
Chloride	2	mg/L		1	EPA 300.0	08/28/2013 2035 AMB
Fluoride	1.3	mg/L		0.1	SM 4500FC	08/28/2013 1740 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1204 RH
Sulfate	169	mg/L		1	EPA 300.0	08/28/2013 2035 AMB
Calcium	2	mg/L		1	EPA 200.7	08/28/2013 1955 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 1955 DG
Potassium	19	mg/L		1	EPA 200.7	08/28/2013 1955 DG
Sodium	311	mg/L		1	EPA 200.7	08/28/2013 1955 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	09/03/2013 1348 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	08/28/2013 1740 KV
Electrical Conductivity	1500	µmhos/cm		5	SM 2510B	08/28/2013 1740 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	08/28/2013 1022 EC
<b>Data Quality</b>						
Cation Sum	14.09	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Anion Sum	13.93	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Cation-Anion Balance (± 5%)	0.58	%		0.01	SM 1030E	09/05/2013 833 JJ
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	09/05/2013 833 JJ

## These results apply only to the samples tested.

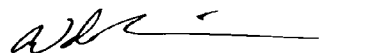
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-002  
**ClientSample ID:** 5368-33-14SM  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 1:00:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/28/2013 1955	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/28/2013 1446	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/28/2013 1446	MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/28/2013 1955	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/28/2013 1446	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/28/2013 1955	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/28/2013 1446	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/28/2013 1955	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/28/2013 1446	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/29/2013 1140	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/28/2013 1446	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/28/2013 1955	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/28/2013 1446	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/28/2013 1446	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 1446	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/28/2013 1446	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/28/2013 1955	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 354	MS
<b>Metals - Total</b>							
Iron	0.06	mg/L		0.05	EPA 200.7	08/29/2013 1511	BK
Manganese	ND	mg/L		0.02	EPA 200.7	08/29/2013 1511	BK

These results apply only to the samples tested.

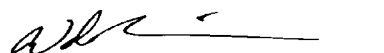
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-002  
**ClientSample ID:** 5368-33-14SM  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 1:00:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.1	pCi/L		2	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	1.6	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	10.4	pCi/L		5	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/17/2013 853	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/14/2013 1548	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/14/2013 1548	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/16/2013 754	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/16/2013 754	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/16/2013 754	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/16/2013 754	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-001  
**ClientSample ID:** 5368-33-14SA  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 9:40:00 AM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.20	s.u.			Field	08/21/2013 940
Conductivity	823	µmhos/cm			Field	08/21/2013 940
Dissolved Oxygen	1.53	mg/L			Field	08/21/2013 940
Dissolved Oxygen (pct)	16.7	%			Field	08/21/2013 940
Turbidity	4.37	NTU			Field	08/21/2013 940
Temperature	19.5	°C			Field	08/21/2013 940
Oxygen Reduction Potential (ORP)	-46	mV			Field	08/21/2013 940
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	391	mg/L		5	SM 2320B	08/28/2013 1536 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	477	mg/L		5	SM 2320B	08/28/2013 1536 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/28/2013 1536 KV
Chloride	1	mg/L		1	EPA 300.0	08/29/2013 253 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	08/24/2013 125 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1401 RH
Sulfate	49	mg/L		1	EPA 300.0	08/29/2013 253 AMB
Calcium	29	mg/L		1	EPA 200.7	08/28/2013 1912 DG
Magnesium	24	mg/L		1	EPA 200.7	08/28/2013 1912 DG
Potassium	12	mg/L		1	EPA 200.7	08/28/2013 1912 DG
Sodium	111	mg/L		1	EPA 200.7	08/28/2013 1912 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1211 RH
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	08/24/2013 125 KV
Electrical Conductivity	831	µmhos/cm		5	SM 2510B	08/24/2013 125 KV
Total Dissolved Solids (180)	460	mg/L		10	SM 2540	08/23/2013 1516 EC
<b>Data Quality</b>						
Cation Sum	8.54	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Anion Sum	8.85	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Cation-Anion Balance (± 5%)	1.79	%		0.01	SM 1030E	09/04/2013 1509 JJ
Solids, Total Dissolved (Calc)	460	mg/L		10	SM 1030E	09/04/2013 1509 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 12





## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-001  
**ClientSample ID:** 5368-33-14SA  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 9:40:00 AM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1603 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1702 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1702 MS
Boron	ND	mg/L		0.1	EPA 200.7	08/26/2013 1603 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1702 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1603 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1702 MS
Iron	0.07	mg/L		0.05	EPA 200.7	08/26/2013 1603 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1702 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1503 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1702 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1603 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1702 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1702 MS
Uranium	0.0126	mg/L		0.0003	EPA 200.8	08/26/2013 1702 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1702 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1603 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2303 MS
<b>Metals - Total</b>						
Iron	0.34	mg/L		0.05	EPA 200.7	08/26/2013 1950 DG
Manganese	0.13	mg/L		0.02	EPA 200.7	08/26/2013 1950 DG

## These results apply only to the samples tested.

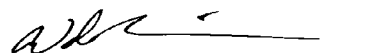
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-001  
**ClientSample ID:** 5368-33-14SA  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 9:40:00 AM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.5	pCi/L		2	SM 7110B	09/16/2013 904	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	09/16/2013 904	SH
Gross Beta	10.2	pCi/L		3	SM 7110B	09/16/2013 904	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	09/16/2013 904	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1418	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/03/2013 1418	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 239	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 239	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/04/2013 1317	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/04/2013 1317	SH
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822	MB

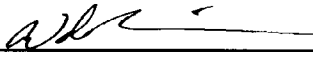
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-004  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 5:30:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.52	s.u.			Field	08/26/2013 1730
Conductivity	1515	µmhos/cm			Field	08/26/2013 1730
Dissolved Oxygen	1.70	mg/L			Field	08/26/2013 1730
Dissolved Oxygen (pct)	17.9	%			Field	08/26/2013 1730
Turbidity	23.7	NTU			Field	08/26/2013 1730
Temperature	15.1	°C			Field	08/26/2013 1730
Oxygen Reduction Potential (ORP)	-126	mV			Field	08/26/2013 1730
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	491	mg/L		5	SM 2320B	08/28/2013 1808 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	529	mg/L		5	SM 2320B	08/28/2013 1808 KV
Alkalinity, Carbonate as CO <sub>3</sub>	35	mg/L		5	SM 2320B	08/28/2013 1808 KV
Chloride	3	mg/L		1	EPA 300.0	08/28/2013 2100 AMB
Fluoride	1.6	mg/L		0.1	SM 4500FC	08/28/2013 1808 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1214 RH
Sulfate	242	mg/L		1	EPA 300.0	08/28/2013 2100 AMB
Calcium	3	mg/L		1	EPA 200.7	08/28/2013 2011 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 2011 DG
Potassium	3	mg/L		1	EPA 200.7	08/28/2013 2011 DG
Sodium	327	mg/L		1	EPA 200.7	08/28/2013 2011 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	09/03/2013 1350 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	08/28/2013 1808 KV
Electrical Conductivity	1630	µmhos/cm		5	SM 2510B	08/28/2013 1808 KV
Total Dissolved Solids (180)	910	mg/L		10	SM 2540	08/28/2013 1024 EC
<b>Data Quality</b>						
Cation Sum	14.50	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Anion Sum	15.02	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Cation-Anion Balance (± 5%)	1.76	%		0.01	SM 1030E	09/05/2013 833 JJ
Solids, Total Dissolved (Calc)	870	mg/L		10	SM 1030E	09/05/2013 833 JJ

These results apply only to the samples tested.

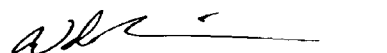
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-004  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 5:30:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/28/2013 2011	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/28/2013 1508	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/28/2013 1508	MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/28/2013 2011	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/28/2013 1508	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/28/2013 2011	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/28/2013 1508	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/28/2013 2011	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/28/2013 1508	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/29/2013 1153	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/28/2013 1508	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/28/2013 2011	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/28/2013 1508	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/28/2013 1508	MS
Uranium	0.0025	mg/L		0.0003	EPA 200.8	08/28/2013 1508	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/28/2013 1508	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/28/2013 2011	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 405	MS
<b>Metals - Total</b>							
Iron	1.29	mg/L		0.05	EPA 200.7	08/29/2013 1520	BK
Manganese	0.03	mg/L		0.02	EPA 200.7	08/29/2013 1520	BK

## These results apply only to the samples tested.

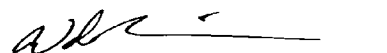
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-004  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 5:30:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	5.9	pCi/L		3	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	ND	pCi/L		4	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/17/2013 853	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/14/2013 2150	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/14/2013 2150	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 751	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 751	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/16/2013 754	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/16/2013 754	MB

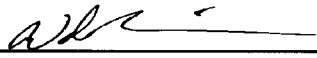
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-003  
**ClientSample ID:** 5368-41-23SM  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 4:10:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.40	s.u.			Field	08/26/2013 1610
Conductivity	1469	µmhos/cm			Field	08/26/2013 1610
Dissolved Oxygen	1.95	mg/L			Field	08/26/2013 1610
Dissolved Oxygen (pct)	20.1	%			Field	08/26/2013 1610
Turbidity	6.14	NTU			Field	08/26/2013 1610
Temperature	14.4	°C			Field	08/26/2013 1610
Oxygen Reduction Potential (ORP)	-129	mV			Field	08/26/2013 1610
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	519	mg/L		5	SM 2320B	08/28/2013 1749 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	563	mg/L		5	SM 2320B	08/28/2013 1749 KV
Alkalinity, Carbonate as CO <sub>3</sub>	35	mg/L		5	SM 2320B	08/28/2013 1749 KV
Chloride	3	mg/L		1	EPA 300.0	08/28/2013 2048 AMB
Fluoride	1.7	mg/L		0.1	SM 4500FC	08/28/2013 1749 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1213 RH
Sulfate	221	mg/L		1	EPA 300.0	08/28/2013 2048 AMB
Calcium	2	mg/L		1	EPA 200.7	08/28/2013 2009 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 2009 DG
Potassium	5	mg/L		1	EPA 200.7	08/28/2013 2009 DG
Sodium	341	mg/L		1	EPA 200.7	08/28/2013 2009 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	09/03/2013 1349 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	08/28/2013 1749 KV
Electrical Conductivity	1640	µmhos/cm		5	SM 2510B	08/28/2013 1749 KV
Total Dissolved Solids (180)	960	mg/L		10	SM 2540	08/28/2013 1023 EC
<b>Data Quality</b>						
Cation Sum	15.09	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Anion Sum	15.15	meq/L		0.01	SM 1030E	09/05/2013 833 JJ
Cation-Anion Balance (± 5%)	0.19	%		0.01	SM 1030E	09/05/2013 833 JJ
Solids, Total Dissolved (Calc)	880	mg/L		10	SM 1030E	09/05/2013 833 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-003  
**ClientSample ID:** 5368-41-23SM  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 4:10:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/28/2013 2009 DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	08/28/2013 1502 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/28/2013 1502 MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/28/2013 2009 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/28/2013 1502 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/28/2013 2009 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/28/2013 1502 MS
Iron	ND	mg/L		0.05	EPA 200.7	08/28/2013 2009 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/28/2013 1502 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/29/2013 1145 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/28/2013 1502 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/28/2013 2009 DG
Selenium	0.007	mg/L		0.005	EPA 200.8	08/28/2013 1502 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/28/2013 1502 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 1502 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/28/2013 1502 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/28/2013 2009 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 359 MS
<b>Metals - Total</b>						
Iron	0.39	mg/L		0.05	EPA 200.7	08/29/2013 1518 BK
Manganese	ND	mg/L		0.02	EPA 200.7	08/29/2013 1518 BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308429001

**ProjectName:** Kendrick  
**Lab ID:** S1308429-003  
**ClientSample ID:** 5368-41-23SM  
**COC:** 150177

**WorkOrder:** S1308429  
**CollectionDate:** 8/26/2013 4:10:00 PM  
**DateReceived:** 8/27/2013 7:53:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	ND	pCi/L		4	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/17/2013 853	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/14/2013 1849	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/14/2013 1849	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 751	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 751	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/16/2013 754	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/16/2013 754	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-002  
**ClientSample ID:** 5368-41-23SA  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 11:00:00 AM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.63	s.u.			Field	08/21/2013 1100
Conductivity	1195	µmhos/cm			Field	08/21/2013 1100
Dissolved Oxygen	2.08	mg/L			Field	08/21/2013 1100
Dissolved Oxygen (pct)	23.4	%			Field	08/21/2013 1100
Turbidity	16.45	NTU			Field	08/21/2013 1100
Temperature	20.2	°C			Field	08/21/2013 1100
Oxygen Reduction Potential (ORP)	+188	mV			Field	08/21/2013 1100
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	540	mg/L		5	SM 2320B	08/24/2013 138 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	659	mg/L		5	SM 2320B	08/24/2013 138 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/24/2013 138 KV
Chloride	3	mg/L		1	EPA 300.0	08/26/2013 1907 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	08/24/2013 138 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1402 RH
Sulfate	164	mg/L		1	EPA 300.0	08/26/2013 1907 AMB
Calcium	122	mg/L		1	EPA 200.7	08/26/2013 1606 DG
Magnesium	63	mg/L		1	EPA 200.7	08/26/2013 1606 DG
Potassium	27	mg/L		1	EPA 200.7	08/26/2013 1606 DG
Sodium	62	mg/L		1	EPA 200.7	08/26/2013 1606 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1212 RH
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	08/24/2013 138 KV
Electrical Conductivity	1250	µmhos/cm		5	SM 2510B	08/24/2013 138 KV
Total Dissolved Solids (180)	810	mg/L		10	SM 2540	08/30/2013 1404 EC
<b>Data Quality</b>						
Cation Sum	14.69	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Anion Sum	14.29	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Cation-Anion Balance (± 5%)	1.38	%		0.01	SM 1030E	09/04/2013 1509 JJ
Solids, Total Dissolved (Calc)	770	mg/L		10	SM 1030E	09/04/2013 1509 JJ

## These results apply only to the samples tested.

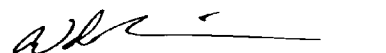
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-002  
**ClientSample ID:** 5368-41-23SA  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 11:00:00 AM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1606	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1707	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1707	MS
Boron	ND	mg/L		0.1	EPA 200.7	08/26/2013 1606	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1707	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1606	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1707	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1606	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1707	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1511	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1707	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1606	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1707	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1707	MS
Uranium	0.0622	mg/L		0.0003	EPA 200.8	08/26/2013 1707	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1707	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1606	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2308	MS
<b>Metals - Total</b>							
Iron	0.73	mg/L		0.05	EPA 200.7	08/26/2013 2002	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	08/26/2013 2002	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-002  
**ClientSample ID:** 5368-41-23SA  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 11:00:00 AM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	49.4	pCi/L		2	SM 7110B	09/16/2013 1827	SH
Gross Alpha Precision (±)	4.2	pCi/L			SM 7110B	09/16/2013 1827	SH
Gross Beta	34.3	pCi/L		3	SM 7110B	09/16/2013 1827	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	09/16/2013 1827	SH
Radium 226	0.7	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1418	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/03/2013 1418	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 540	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 540	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/04/2013 1317	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/04/2013 1317	SH
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-004  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 1:15:00 PM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.53	s.u.			Field	08/27/2013 1315
Conductivity	1824	µmhos/cm			Field	08/27/2013 1315
Dissolved Oxygen	2.17	mg/L			Field	08/27/2013 1315
Dissolved Oxygen (pct)	22.2	%			Field	08/27/2013 1315
Turbidity	0.58	NTU			Field	08/27/2013 1315
Temperature	15.3	°C			Field	08/27/2013 1315
Oxygen Reduction Potential (ORP)	-45	mV			Field	08/27/2013 1315
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	480	mg/L		5	SM 2320B	08/29/2013 1937 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	503	mg/L		5	SM 2320B	08/29/2013 1937 KV
Alkalinity, Carbonate as CO <sub>3</sub>	41	mg/L		5	SM 2320B	08/29/2013 1937 KV
Chloride	9	mg/L		1	EPA 300.0	08/29/2013 2354 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	08/29/2013 1937 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1154 RH
Sulfate	422	mg/L		1	EPA 300.0	08/29/2013 2354 AMB
Calcium	2	mg/L		1	EPA 200.7	08/30/2013 1211 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/30/2013 1211 DG
Potassium	6	mg/L		1	EPA 200.7	08/30/2013 1211 DG
Sodium	438	mg/L		1	EPA 200.7	08/30/2013 1211 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	09/03/2013 1320 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	08/29/2013 1937 KV
Electrical Conductivity	1820	µmhos/cm		5	SM 2510B	08/29/2013 1937 KV
Total Dissolved Solids (180)	1190	mg/L		10	SM 2540	08/29/2013 1142 EC
<b>Data Quality</b>						
Cation Sum	19.32	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Anion Sum	18.72	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Cation-Anion Balance (± 5%)	1.56	%		0.01	SM 1030E	09/09/2013 1114 JJ
Solids, Total Dissolved (Calc)	1170	mg/L		10	SM 1030E	09/09/2013 1114 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-004  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 1:15:00 PM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/30/2013 1211	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/29/2013 1705	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1705	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/30/2013 1211	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1705	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/30/2013 1211	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1705	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/30/2013 1211	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1705	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 938	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1705	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/30/2013 1211	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/29/2013 1705	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1705	MS
Uranium	0.0094	mg/L		0.0003	EPA 200.8	08/29/2013 1705	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1705	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/30/2013 1211	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 515	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	08/30/2013 1803	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1803	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-004  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 1:15:00 PM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	16.2	pCi/L		4	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	3.6	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	ND	pCi/L		8	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 1058	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/17/2013 1058	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/15/2013 955	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/15/2013 955	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/18/2013 736	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/18/2013 736	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-003  
**ClientSample ID:** 5368-24-12SM  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 12:20:00 PM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.48	s.u.			Field	08/27/2013 1220
Conductivity	1374	µmhos/cm			Field	08/27/2013 1220
Dissolved Oxygen	2.15	mg/L			Field	08/27/2013 1220
Dissolved Oxygen (pct)	21.6	%			Field	08/27/2013 1220
Turbidity	18.30	NTU			Field	08/27/2013 1220
Temperature	14.7	°C			Field	08/27/2013 1220
Oxygen Reduction Potential (ORP)	-87	mV			Field	08/27/2013 1220
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	526	mg/L		5	SM 2320B	08/29/2013 1911 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	561	mg/L		5	SM 2320B	08/29/2013 1911 KV
Alkalinity, Carbonate as CO <sub>3</sub>	40	mg/L		5	SM 2320B	08/29/2013 1911 KV
Chloride	3	mg/L		1	EPA 300.0	08/29/2013 2340 AMB
Fluoride	2.3	mg/L		0.1	SM 4500FC	08/29/2013 1911 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1146 RH
Sulfate	184	mg/L		1	EPA 300.0	08/29/2013 2340 AMB
Calcium	3	mg/L		1	EPA 200.7	08/30/2013 1209 DG
Magnesium	1	mg/L		1	EPA 200.7	08/30/2013 1209 DG
Potassium	4	mg/L		1	EPA 200.7	08/30/2013 1209 DG
Sodium	339	mg/L		1	EPA 200.7	08/30/2013 1209 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	09/03/2013 1319 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	08/29/2013 1911 KV
Electrical Conductivity	1360	µmhos/cm		5	SM 2510B	08/29/2013 1911 KV
Total Dissolved Solids (180)	880	mg/L		10	SM 2540	08/29/2013 1141 EC
<b>Data Quality</b>						
Cation Sum	15.04	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Anion Sum	14.55	meq/L		0.01	SM 1030E	09/09/2013 1114 JJ
Cation-Anion Balance (± 5%)	1.66	%		0.01	SM 1030E	09/09/2013 1114 JJ
Solids, Total Dissolved (Calc)	850	mg/L		10	SM 1030E	09/09/2013 1114 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-003  
**ClientSample ID:** 5368-24-12SM  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 12:20:00 PM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/30/2013 1209	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/29/2013 1659	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1659	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/30/2013 1209	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1659	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/30/2013 1209	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1659	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/30/2013 1209	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1659	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 936	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1659	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/30/2013 1209	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/29/2013 1659	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1659	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/29/2013 1659	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1659	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/30/2013 1209	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 454	MS
<b>Metals - Total</b>							
Iron	0.64	mg/L		0.05	EPA 200.7	08/30/2013 1801	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1801	DG

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/30/2013  
**Report ID:** S1308458001

**ProjectName:** Kendrick  
**Lab ID:** S1308458-003  
**ClientSample ID:** 5368-24-12SM  
**COC:** 150178

**WorkOrder:** S1308458  
**CollectionDate:** 8/27/2013 12:20:00 PM  
**DateReceived:** 8/28/2013 8:04:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	ND	pCi/L		4	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 1058	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/17/2013 1058	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/15/2013 654	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/15/2013 654	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 751	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 751	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/18/2013 736	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/18/2013 736	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-002  
**ClientSample ID:** 5368-24-12SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 2:10:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.61	s.u.			Field	08/19/2013 1410
Conductivity	1100	µmhos/cm			Field	08/19/2013 1410
Dissolved Oxygen	1.54	mg/L			Field	08/19/2013 1410
Dissolved Oxygen (pct)	18.0	%			Field	08/19/2013 1410
Turbidity	5.68	NTU			Field	08/19/2013 1410
Temperature	22.2	°C			Field	08/19/2013 1410
Oxygen Reduction Potential (ORP)	-54	mV			Field	08/19/2013 1410
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	573	mg/L		5	SM 2320B	08/22/2013 2116 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	587	mg/L		5	SM 2320B	08/22/2013 2116 KV
Alkalinity, Carbonate as CO <sub>3</sub>	55	mg/L		5	SM 2320B	08/22/2013 2116 KV
Chloride	2	mg/L		1	EPA 300.0	08/22/2013 1857 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	08/22/2013 2116 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1305 RH
Sulfate	50	mg/L		1	EPA 300.0	08/22/2013 1857 AMB
Calcium	2	mg/L		1	EPA 200.7	08/23/2013 1437 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/23/2013 1437 DG
Potassium	6	mg/L		1	EPA 200.7	08/23/2013 1437 DG
Sodium	271	mg/L		1	EPA 200.7	08/23/2013 1437 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1159 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	08/22/2013 2116 KV
Electrical Conductivity	1040	µmhos/cm		5	SM 2510B	08/22/2013 2116 KV
Total Dissolved Solids (180)	660	mg/L		10	SM 2540	08/23/2013 710 EC
<b>Data Quality</b>						
Cation Sum	12.04	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	12.58	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	2.19	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	680	mg/L		10	SM 1030E	08/30/2013 1400 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-002  
**ClientSample ID:** 5368-24-12SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 2:10:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1437	DG
Arsenic	0.024	mg/L		0.005	EPA 200.8	08/22/2013 2001	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 2001	MS
Boron	0.2	mg/L		0.1	EPA 200.7	08/23/2013 1437	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 2001	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1437	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 2001	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/23/2013 1437	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 2001	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1150	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 2001	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1437	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/22/2013 2001	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 2001	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/22/2013 2001	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 2001	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1437	DG
<b>Metals - Suspended</b>							
Uranium	0.0005	mg/L		0.0003	EPA 200.8	08/28/2013 2214	MS
<b>Metals - Total</b>							
Iron	0.21	mg/L		0.05	EPA 200.7	08/23/2013 1844	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/23/2013 1844	DG

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-002  
**ClientSample ID:** 5368-24-12SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 2:10:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	2.9	pCi/L		2	SM 7110B	09/12/2013 810 SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	09/12/2013 810 SH
Gross Beta	ND	pCi/L		4	SM 7110B	09/12/2013 810 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/12/2013 810 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1931 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	08/28/2013 1931 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/04/2013 1200 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/04/2013 1200 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1600 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1600 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/08/2013 1414 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/08/2013 1414 MB

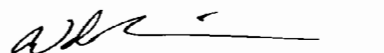
**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-003  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 11:30:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.62	s.u.			Field	08/28/2013 1130
Conductivity	1823	µmhos/cm			Field	08/28/2013 1130
Dissolved Oxygen	2.51	mg/L			Field	08/28/2013 1130
Dissolved Oxygen (pct)	25.3	%			Field	08/28/2013 1130
Turbidity	25.3	NTU			Field	08/28/2013 1130
Temperature	14.4	°C			Field	08/28/2013 1130
Oxygen Reduction Potential (ORP)	-82	mV			Field	08/28/2013 1130
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	568	mg/L		5	SM 2320B	08/29/2013 1746 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	595	mg/L		5	SM 2320B	08/29/2013 1746 KV
Alkalinity, Carbonate as CO <sub>3</sub>	48	mg/L		5	SM 2320B	08/29/2013 1746 KV
Chloride	4	mg/L		1	EPA 300.0	08/29/2013 1945 AMB
Fluoride	1.1	mg/L		0.1	SM 4500FC	08/29/2013 1746 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1217 RH
Sulfate	361	mg/L		1	EPA 300.0	08/29/2013 1945 AMB
Calcium	2	mg/L		1	EPA 200.7	08/29/2013 1351 BK
Magnesium	ND	mg/L		1	EPA 200.7	08/29/2013 1351 BK
Potassium	9	mg/L		1	EPA 200.7	08/29/2013 1351 BK
Sodium	431	mg/L		1	EPA 200.7	08/29/2013 1351 BK
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	09/03/2013 1354 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	08/29/2013 1746 KV
Electrical Conductivity	1800	µmhos/cm		5	SM 2510B	08/29/2013 1746 KV
Total Dissolved Solids (180)	1200	mg/L		10	SM 2540	08/29/2013 1136 EC
<b>Data Quality</b>						
Cation Sum	19.08	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Anion Sum	19.05	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Cation-Anion Balance (± 5%)	0.06	%		0.01	SM 1030E	09/06/2013 1231 JJ
Solids, Total Dissolved (Calc)	1150	mg/L		10	SM 1030E	09/06/2013 1231 JJ

## These results apply only to the samples tested.

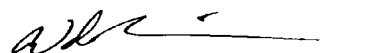
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

Company: Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

Date Reported 9/30/2013  
Report ID: S1308453001

ProjectName: Kendrick  
Lab ID: S1308453-003  
ClientSample ID: 5368-43-24OZ  
COC: 150179

WorkOrder: S1308453  
CollectionDate: 8/28/2013 11:30:00 AM  
DateReceived: 8/28/2013 4:06:00 PM  
FieldSampler: RF  
Matrix: Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/29/2013 1351	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	08/29/2013 1616	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1616	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/29/2013 1351	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1616	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/29/2013 1351	BK
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1616	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/29/2013 1351	BK
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1616	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 924	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1616	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/29/2013 1351	BK
Selenium	ND	mg/L		0.005	EPA 200.8	08/29/2013 1616	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1616	MS
Uranium	0.0010	mg/L		0.0003	EPA 200.8	08/29/2013 1616	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1616	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/29/2013 1351	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 432	MS
<b>Metals - Total</b>							
Iron	1.07	mg/L		0.05	EPA 200.7	08/30/2013 1745	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1745	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

Qualifiers: \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-003  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 11:30:00 AM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		4	SM 7110B	09/19/2013 000 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000 SH
Gross Beta	ND	pCi/L		6	SM 7110B	09/19/2013 000 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 1058 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/17/2013 1058 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/17/2013 1525 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/17/2013 1525 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202 MB

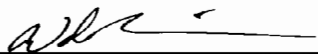
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-004  
**ClientSample ID:** 5368-43-24SM  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 12:40:00 PM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.28	s.u.			Field	08/28/2013 1240
Conductivity	1822	µmhos/cm			Field	08/28/2013 1240
Dissolved Oxygen	1.48	mg/L			Field	08/28/2013 1240
Dissolved Oxygen (pct)	15.0	%			Field	08/28/2013 1240
Turbidity	3.77	NTU			Field	08/28/2013 1240
Temperature	14.1	°C			Field	08/28/2013 1240
Oxygen Reduction Potential (ORP)	-160	mV			Field	08/28/2013 1240
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	572	mg/L		5	SM 2320B	08/29/2013 1800 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	639	mg/L		5	SM 2320B	08/29/2013 1800 KV
Alkalinity, Carbonate as CO <sub>3</sub>	29	mg/L		5	SM 2320B	08/29/2013 1800 KV
Chloride	5	mg/L		1	EPA 300.0	08/29/2013 1958 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	08/29/2013 1800 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1218 RH
Sulfate	350	mg/L		1	EPA 300.0	08/29/2013 1958 AMB
Calcium	4	mg/L		1	EPA 200.7	08/29/2013 1353 BK
Magnesium	2	mg/L		1	EPA 200.7	08/29/2013 1353 BK
Potassium	4	mg/L		1	EPA 200.7	08/29/2013 1353 BK
Sodium	418	mg/L		1	EPA 200.7	08/29/2013 1353 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	09/03/2013 1355 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	08/29/2013 1800 KV
Electrical Conductivity	1770	µmhos/cm		5	SM 2510B	08/29/2013 1800 KV
Total Dissolved Solids (180)	1160	mg/L		10	SM 2540	08/29/2013 1137 EC
<b>Data Quality</b>						
Cation Sum	18.64	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Anion Sum	18.92	meq/L		0.01	SM 1030E	09/06/2013 1231 JJ
Cation-Anion Balance (± 5%)	0.76	%		0.01	SM 1030E	09/06/2013 1231 JJ
Solids, Total Dissolved (Calc)	1130	mg/L		10	SM 1030E	09/06/2013 1231 JJ

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-004  
**ClientSample ID:** 5368-43-24SM  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 12:40:00 PM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/29/2013 1353	BK
Arsenic	0.009	mg/L		0.005	EPA 200.8	08/29/2013 1621	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/29/2013 1621	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/29/2013 1353	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	08/29/2013 1621	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/29/2013 1353	BK
Copper	ND	mg/L		0.01	EPA 200.8	08/29/2013 1621	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/29/2013 1353	BK
Lead	ND	mg/L		0.02	EPA 200.8	08/29/2013 1621	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/05/2013 926	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/29/2013 1621	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/29/2013 1353	BK
Selenium	0.015	mg/L		0.005	EPA 200.8	08/29/2013 1621	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/29/2013 1621	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/29/2013 1621	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/29/2013 1621	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/29/2013 1353	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/05/2013 438	MS
<b>Metals - Total</b>							
Iron	0.14	mg/L		0.05	EPA 200.7	08/30/2013 1747	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/30/2013 1747	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/30/2013  
**Report ID:** S1308453001

**ProjectName:** Kendrick  
**Lab ID:** S1308453-004  
**ClientSample ID:** 5368-43-24SM  
**COC:** 150179

**WorkOrder:** S1308453  
**CollectionDate:** 8/28/2013 12:40:00 PM  
**DateReceived:** 8/28/2013 4:06:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	09/19/2013 000	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Gross Beta	ND	pCi/L		6	SM 7110B	09/19/2013 000	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/19/2013 000	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 1058	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/17/2013 1058	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/17/2013 1826	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/17/2013 1826	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/17/2013 1202	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/17/2013 1202	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 1223	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 1223	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/18/2013 736	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/18/2013 736	MB

## These results apply only to the samples tested.

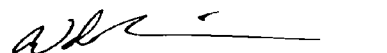
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 8:45:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.30	s.u.			Field	08/22/2013 845
Conductivity	842	µmhos/cm			Field	08/22/2013 845
Dissolved Oxygen	2.40	mg/L			Field	08/22/2013 845
Dissolved Oxygen (pct)	23.7	%			Field	08/22/2013 845
Turbidity	6.27	NTU			Field	08/22/2013 845
Temperature	14.5	°C			Field	08/22/2013 845
Oxygen Reduction Potential (ORP)	+113	mV			Field	08/22/2013 845
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	365	mg/L		5	SM 2320B	08/26/2013 1757 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	445	mg/L		5	SM 2320B	08/26/2013 1757 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/26/2013 1757 KV
Chloride	4	mg/L		1	EPA 300.0	08/26/2013 2049 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/26/2013 1757 KV
Nitrogen, Nitrate+Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	08/26/2013 1415 RH
Sulfate	81	mg/L		1	EPA 300.0	08/26/2013 2049 AMB
Calcium	45	mg/L		1	EPA 200.7	08/26/2013 1810 DG
Magnesium	24	mg/L		1	EPA 200.7	08/26/2013 1810 DG
Potassium	9	mg/L		1	EPA 200.7	08/26/2013 1810 DG
Sodium	106	mg/L		1	EPA 200.7	08/26/2013 1810 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1216 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	08/26/2013 1757 KV
Electrical Conductivity	908	µmhos/cm		5	SM 2510B	08/26/2013 1757 KV
Total Dissolved Solids (180)	490	mg/L		10	SM 2540	08/28/2013 1305 EC
<b>Data Quality</b>						
Cation Sum	9.06	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Anion Sum	9.13	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Cation-Anion Balance (± 5%)	0.37	%		0.01	SM 1030E	09/23/2013 1313 WN
Solids, Total Dissolved (Calc)	490	mg/L		10	SM 1030E	09/23/2013 1313 WN

These results apply only to the samples tested.

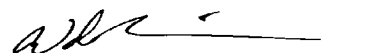
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 8:45:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1810	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1801	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1801	MS
Boron	ND	mg/L		0.1	EPA 200.7	08/26/2013 1810	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1801	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1810	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1801	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1810	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1801	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1519	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1801	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1810	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1801	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1801	MS
Uranium	0.0581	mg/L		0.0003	EPA 200.8	08/26/2013 1801	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1801	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1810	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2357	MS
<b>Metals - Total</b>							
Iron	0.19	mg/L		0.05	EPA 200.7	08/26/2013 2218	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/26/2013 2218	DG

## These results apply only to the samples tested.

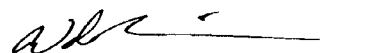
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 8:45:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	39.1	pCi/L		2	SM 7110B	09/16/2013 1827 SH
Gross Alpha Precision (±)	2.9	pCi/L			SM 7110B	09/16/2013 1827 SH
Gross Beta	17.7	pCi/L		3	SM 7110B	09/16/2013 1827 SH
Gross Beta Precision (±)	1.8	pCi/L			SM 7110B	09/16/2013 1827 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1418 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/03/2013 1418 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 1744 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 1744 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1145 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1145 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/11/2013 910 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/11/2013 910 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-004  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 11:10:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.70	s.u.			Field	08/22/2013 1110
Conductivity	1431	µmhos/cm			Field	08/22/2013 1110
Dissolved Oxygen	1.57	mg/L			Field	08/22/2013 1110
Dissolved Oxygen (pct)	15.5	%			Field	08/22/2013 1110
Turbidity	1.15	NTU			Field	08/22/2013 1110
Temperature	14.3	°C			Field	08/22/2013 1110
Oxygen Reduction Potential (ORP)	-60	mV			Field	08/22/2013 1110
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	457	mg/L		5	SM 2320B	08/26/2013 1815 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	465	mg/L		5	SM 2320B	08/26/2013 1815 KV
Alkalinity, Carbonate as CO <sub>3</sub>	45	mg/L		5	SM 2320B	08/26/2013 1815 KV
Chloride	6	mg/L		1	EPA 300.0	08/26/2013 2111 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	08/26/2013 1815 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1417 RH
Sulfate	226	mg/L		1	EPA 300.0	08/26/2013 2111 AMB
Calcium	2	mg/L		1	EPA 200.7	08/26/2013 1816 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/26/2013 1816 DG
Potassium	4	mg/L		1	EPA 200.7	08/26/2013 1816 DG
Sodium	350	mg/L		1	EPA 200.7	08/26/2013 1816 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1218 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	08/26/2013 1815 KV
Electrical Conductivity	1530	µmhos/cm		5	SM 2510B	08/26/2013 1815 KV
Total Dissolved Solids (180)	880	mg/L		10	SM 2540	08/28/2013 1307 EC
<b>Data Quality</b>						
Cation Sum	15.40	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Anion Sum	14.04	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Cation-Anion Balance (± 5%)	4.63	%		0.01	SM 1030E	09/23/2013 1313 WN
Solids, Total Dissolved (Calc)	860	mg/L		10	SM 1030E	09/23/2013 1313 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-004  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 11:10:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1816	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1812	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1812	MS
Boron	0.2	mg/L		0.1	EPA 200.7	08/26/2013 1816	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1812	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1816	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1812	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1816	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1812	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1523	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1812	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1816	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1812	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1812	MS
Uranium	0.0103	mg/L		0.0003	EPA 200.8	08/26/2013 1812	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1812	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1816	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/29/2013 008	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 2230	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/26/2013 2230	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-004  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 11:10:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	20.0	pCi/L		2	SM 7110B	09/17/2013 851 SH
Gross Alpha Precision (±)	2.9	pCi/L			SM 7110B	09/17/2013 851 SH
Gross Beta	8.8	pCi/L		3	SM 7110B	09/17/2013 851 SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	09/17/2013 851 SH
Radium 226	0.6	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1632 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/03/2013 1632 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 1142 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 1142 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1145 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1145 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/11/2013 910 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/11/2013 910 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226 MB

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-003  
**ClientSample ID:** 5368-32-23SM  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 10:30:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.79	s.u.			Field	08/22/2013 1030
Conductivity	1486	µmhos/cm			Field	08/22/2013 1030
Dissolved Oxygen	1.65	mg/L			Field	08/22/2013 1030
Dissolved Oxygen (pct)	16.3	%			Field	08/22/2013 1030
Turbidity	1.29	NTU			Field	08/22/2013 1030
Temperature	13.5	°C			Field	08/22/2013 1030
Oxygen Reduction Potential (ORP)	-118	mV			Field	08/22/2013 1030
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	529	mg/L		5	SM 2320B	08/26/2013 1805 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	518	mg/L		5	SM 2320B	08/26/2013 1805 KV
Alkalinity, Carbonate as CO <sub>3</sub>	63	mg/L		5	SM 2320B	08/26/2013 1805 KV
Chloride	5	mg/L		1	EPA 300.0	08/26/2013 2100 AMB
Fluoride	1.7	mg/L		0.1	SM 4500FC	08/26/2013 1805 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1416 RH
Sulfate	197	mg/L		1	EPA 300.0	08/26/2013 2100 AMB
Calcium	2	mg/L		1	EPA 200.7	08/26/2013 1812 DG
Magnesium	1	mg/L		1	EPA 200.7	08/26/2013 1812 DG
Potassium	8	mg/L		1	EPA 200.7	08/26/2013 1812 DG
Sodium	366	mg/L		1	EPA 200.7	08/26/2013 1812 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1217 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	08/26/2013 1805 KV
Electrical Conductivity	1600	µmhos/cm		5	SM 2510B	08/26/2013 1805 KV
Total Dissolved Solids (180)	930	mg/L		10	SM 2540	08/28/2013 1306 EC
<b>Data Quality</b>						
Cation Sum	16.33	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Anion Sum	14.90	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Cation-Anion Balance (± 5%)	4.58	%		0.01	SM 1030E	09/23/2013 1313 WN
Solids, Total Dissolved (Calc)	900	mg/L		10	SM 1030E	09/23/2013 1313 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-003  
**ClientSample ID:** 5368-32-23SM  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 10:30:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1812	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1806	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1806	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/26/2013 1812	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1806	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1812	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1806	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1812	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1806	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1521	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1806	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1812	DG
Selenium	0.005	mg/L		0.005	EPA 200.8	08/26/2013 1806	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1806	MS
Uranium	0.0006	mg/L		0.0003	EPA 200.8	08/26/2013 1806	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1806	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1812	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/29/2013 002	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 2221	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/26/2013 2221	DG

## These results apply only to the samples tested.

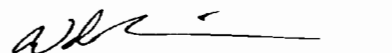
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-003  
**ClientSample ID:** 5368-32-23SM  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 10:30:00 AM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	09/17/2013 851 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/17/2013 851 SH
Gross Beta	5.0	pCi/L		3	SM 7110B	09/17/2013 851 SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	09/17/2013 851 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1418 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/03/2013 1418 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 841 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 841 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1145 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1145 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/11/2013 910 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/11/2013 910 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226 MB

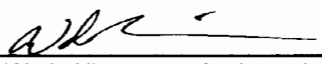
## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308390001

**ProjectName:** Kendrick  
**Lab ID:** S1308390-001  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 150186

**WorkOrder:** S1308390  
**CollectionDate:** 8/23/2013 11:40:00 AM  
**DateReceived:** 8/23/2013 4:04:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.45	s.u.			Field	08/23/2013 1140
Conductivity	1498	µmhos/cm			Field	08/23/2013 1140
Dissolved Oxygen	1.85	mg/L			Field	08/23/2013 1140
Dissolved Oxygen (pct)	18.3	%			Field	08/23/2013 1140
Turbidity	1.53	NTU			Field	08/23/2013 1140
Temperature	14.4	°C			Field	08/23/2013 1140
Oxygen Reduction Potential (ORP)	-102	mV			Field	08/23/2013 1140
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	496	mg/L		5	SM 2320B	09/05/2013 1619 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	530	mg/L		5	SM 2320B	09/05/2013 1619 KV
Alkalinity, Carbonate as CO <sub>3</sub>	37	mg/L		5	SM 2320B	09/05/2013 1619 KV
Chloride	8	mg/L		1	EPA 300.0	09/05/2013 1247 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	08/26/2013 1843 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1201 RH
Sulfate	276	mg/L		1	EPA 300.0	09/05/2013 1247 AMB
Calcium	3	mg/L		1	EPA 200.7	09/06/2013 1311 DG
Magnesium	1	mg/L		1	EPA 200.7	08/26/2013 1835 DG
Potassium	6	mg/L		1	EPA 200.7	08/26/2013 1835 DG
Sodium	389	mg/L		1	EPA 200.7	08/26/2013 1835 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	09/03/2013 1338 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	08/26/2013 1843 KV
Electrical Conductivity	1730	µmhos/cm		5	SM 2510B	08/26/2013 1843 KV
Total Dissolved Solids (180)	1010	mg/L		10	SM 2540	08/28/2013 1310 EC
<b>Data Quality</b>						
Cation Sum	17.36	meq/L		0.01	SM 1030E	09/09/2013 1105 JJ
Anion Sum	15.96	meq/L		0.01	SM 1030E	09/09/2013 1105 JJ
Cation-Anion Balance (± 5%)	4.22	%		0.01	SM 1030E	09/09/2013 1105 JJ
Solids, Total Dissolved (Calc)	980	mg/L		10	SM 1030E	09/09/2013 1105 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 6



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308390001

**ProjectName:** Kendrick  
**Lab ID:** S1308390-001  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 150186

**WorkOrder:** S1308390  
**CollectionDate:** 8/23/2013 11:40:00 AM  
**DateReceived:** 8/23/2013 4:04:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1835	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1828	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1828	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/26/2013 1835	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1828	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1835	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1828	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1835	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1828	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/29/2013 1012	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1828	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1835	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1828	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1828	MS
Uranium	0.0132	mg/L		0.0003	EPA 200.8	08/26/2013 1828	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1828	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1835	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/30/2013 2101	MS
<b>Metals - Total</b>							
Iron	0.11	mg/L		0.05	EPA 200.7	08/29/2013 1425	BK
Manganese	ND	mg/L		0.02	EPA 200.7	08/29/2013 1425	BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308390001

**ProjectName:** Kendrick  
**Lab ID:** S1308390-001  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 150186

**WorkOrder:** S1308390  
**CollectionDate:** 8/23/2013 11:40:00 AM  
**DateReceived:** 8/23/2013 4:04:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	19.5	pCi/L		3	SM 7110B	09/15/2013 2059	SH
Gross Alpha Precision (±)	3.4	pCi/L			SM 7110B	09/15/2013 2059	SH
Gross Beta	ND	pCi/L		7	SM 7110B	09/15/2013 2059	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/15/2013 2059	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/17/2013 853	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/14/2013 645	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/14/2013 645	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/13/2013 1156	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/13/2013 1156	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 933	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/18/2013 933	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/23/2013 1058	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/23/2013 1058	MB

## These results apply only to the samples tested.

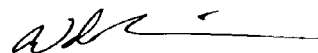
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308390001

**ProjectName:** Kendrick  
**Lab ID:** S1308390-002  
**ClientSample ID:** 5368-41-36SM  
**COC:** 150186

**WorkOrder:** S1308390  
**CollectionDate:** 8/23/2013 12:40:00 PM  
**DateReceived:** 8/23/2013 4:04:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.08	s.u.			Field	08/23/2013 1240
Conductivity	1495	µmhos/cm			Field	08/23/2013 1240
Dissolved Oxygen	1.52	mg/L			Field	08/23/2013 1240
Dissolved Oxygen (pct)	14.5	%			Field	08/23/2013 1240
Turbidity	261	NTU			Field	08/23/2013 1240
Temperature	13.2	°C			Field	08/23/2013 1240
Oxygen Reduction Potential (ORP)	-50	mV			Field	08/23/2013 1240
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	471	mg/L		5	SM 2320B	08/26/2013 1852 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	397	mg/L		5	SM 2320B	08/26/2013 1852 KV
Alkalinity, Carbonate as CO <sub>3</sub>	88	mg/L		5	SM 2320B	08/26/2013 1852 KV
Chloride	8	mg/L		1	EPA 300.0	08/26/2013 2157 AMB
Fluoride	1.6	mg/L		0.1	SM 4500FC	08/26/2013 1852 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/30/2013 1202 RH
Sulfate	222	mg/L		1	EPA 300.0	08/26/2013 2157 AMB
Calcium	2	mg/L		1	EPA 200.7	08/26/2013 1837 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/26/2013 1837 DG
Potassium	9	mg/L		1	EPA 200.7	08/26/2013 1837 DG
Sodium	355	mg/L		1	EPA 200.7	08/26/2013 1837 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	09/03/2013 1339 RH
<b>General Parameters</b>						
pH	9.5	s.u.		0.1	SM 4500 H B	08/26/2013 1852 KV
Electrical Conductivity	1560	µmhos/cm		5	SM 2510B	08/26/2013 1852 KV
Total Dissolved Solids (180)	880	mg/L		10	SM 2540	08/28/2013 1312 EC
<b>Data Quality</b>						
Cation Sum	15.76	meq/L		0.01	SM 1030E	09/09/2013 1105 JJ
Anion Sum	14.34	meq/L		0.01	SM 1030E	09/09/2013 1105 JJ
Cation-Anion Balance (± 5%)	4.71	%		0.01	SM 1030E	09/09/2013 1105 JJ
Solids, Total Dissolved (Calc)	880	mg/L		10	SM 1030E	09/09/2013 1105 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308390001

**ProjectName:** Kendrick  
**Lab ID:** S1308390-002  
**ClientSample ID:** 5368-41-36SM  
**COC:** 150186

**WorkOrder:** S1308390  
**CollectionDate:** 8/23/2013 12:40:00 PM  
**DateReceived:** 8/23/2013 4:04:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.1	mg/L		0.1	EPA 200.7	08/26/2013 1837	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1855	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1855	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/26/2013 1837	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1855	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1837	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1855	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1837	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1855	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/29/2013 1036	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1855	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1837	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1855	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1855	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	08/26/2013 1855	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1855	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1837	DG
<b>Metals - Suspended</b>							
Uranium	0.0004	mg/L		0.0003	EPA 200.8	08/30/2013 2122	MS
<b>Metals - Total</b>							
Iron	7.12	mg/L		0.05	EPA 200.7	08/29/2013 1430	BK
Manganese	0.12	mg/L		0.02	EPA 200.7	08/29/2013 1430	BK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308390001

**ProjectName:** Kendrick  
**Lab ID:** S1308390-002  
**ClientSample ID:** 5368-41-36SM  
**COC:** 150186

**WorkOrder:** S1308390  
**CollectionDate:** 8/23/2013 12:40:00 PM  
**DateReceived:** 8/23/2013 4:04:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		4	SM 7110B	09/15/2013 2059 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/15/2013 2059 SH
Gross Beta	ND	pCi/L		6	SM 7110B	09/15/2013 2059 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/15/2013 2059 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/17/2013 853 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/17/2013 853 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/14/2013 946 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/14/2013 946 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/13/2013 1156 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/13/2013 1156 MB
<b>Radionuclides - Suspended</b>						
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	09/18/2013 933 SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/18/2013 933 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-006  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 11:30:00 AM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.58	s.u.			Field	08/20/2013 1130
Conductivity	1379	µmhos/cm			Field	08/20/2013 1130
Dissolved Oxygen	1.70	mg/L			Field	08/20/2013 1130
Dissolved Oxygen (pct)	17.6	%			Field	08/20/2013 1130
Turbidity	7.34	NTU			Field	08/20/2013 1130
Temperature	16.0	°C			Field	08/20/2013 1130
Oxygen Reduction Potential (ORP)	+4	mV			Field	08/20/2013 1130
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	507	mg/L		5	SM 2320B	08/27/2013 1727 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	539	mg/L		5	SM 2320B	08/27/2013 1727 KV
Alkalinity, Carbonate as CO <sub>3</sub>	39	mg/L		5	SM 2320B	08/27/2013 1727 KV
Chloride	11	mg/L		1	EPA 300.0	08/22/2013 2103 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	08/22/2013 2218 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1316 RH
Sulfate	194	mg/L		1	EPA 300.0	08/22/2013 2103 AMB
Calcium	2	mg/L		1	EPA 200.7	08/28/2013 1837 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 1837 DG
Potassium	2	mg/L		1	EPA 200.7	08/28/2013 1837 DG
Sodium	342	mg/L		1	EPA 200.7	08/23/2013 1446 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1203 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	08/22/2013 2218 KV
Electrical Conductivity	1310	µmhos/cm		5	SM 2510B	08/22/2013 2218 KV
Total Dissolved Solids (180)	860	mg/L		10	SM 2540	08/23/2013 714 EC
<b>Data Quality</b>						
Cation Sum	15.05	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	14.55	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	1.69	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	860	mg/L		10	SM 1030E	08/30/2013 1400 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-006  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 11:30:00 AM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1446	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/22/2013 2049	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 2049	MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/23/2013 1446	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 2049	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1446	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 2049	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/23/2013 1446	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 2049	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1158	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 2049	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1446	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/22/2013 2049	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 2049	MS
Uranium	0.0252	mg/L		0.0003	EPA 200.8	08/22/2013 2049	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 2049	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1446	DG
<b>Metals - Suspended</b>							
Uranium	0.0003	mg/L		0.0003	EPA 200.8	08/28/2013 2247	MS
<b>Metals - Total</b>							
Iron	0.17	mg/L		0.05	EPA 200.7	08/23/2013 1904	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/23/2013 1904	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-006  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 11:30:00 AM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	90.2	pCi/L		2	SM 7110B	09/15/2013 2059	SH
Gross Alpha Precision (±)	5.1	pCi/L			SM 7110B	09/15/2013 2059	SH
Gross Beta	16.3	pCi/L		4	SM 7110B	09/15/2013 2059	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	09/15/2013 2059	SH
Radium 226	4.2	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1931	SH
Radium 226 Precision (±)	0.3	pCi/L			SM 7500 Ra-B	08/28/2013 1931	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/05/2013 004	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/05/2013 004	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1600	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1600	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553	SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/10/2013 1553	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-008  
**ClientSample ID:** 5368-31-35SM  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 4:00:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.82	s.u.			Field	08/20/2013 1600
Conductivity	1492	µmhos/cm			Field	08/20/2013 1600
Dissolved Oxygen	1.58	mg/L			Field	08/20/2013 1600
Dissolved Oxygen (pct)	16.4	%			Field	08/20/2013 1600
Turbidity	3.04	NTU			Field	08/20/2013 1600
Temperature	16.0	°C			Field	08/20/2013 1600
Oxygen Reduction Potential (ORP)	-61	mV			Field	08/20/2013 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	426	mg/L		5	SM 2320B	08/27/2013 1736 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	409	mg/L		5	SM 2320B	08/27/2013 1736 KV
Alkalinity, Carbonate as CO <sub>3</sub>	55	mg/L		5	SM 2320B	08/27/2013 1736 KV
Chloride	21	mg/L		1	EPA 300.0	08/28/2013 1236 AMB
Fluoride	2.1	mg/L		0.1	SM 4500FC	08/22/2013 2242 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1319 RH
Sulfate	242	mg/L		1	EPA 300.0	08/28/2013 1236 AMB
Calcium	1	mg/L		1	EPA 200.7	08/23/2013 1504 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 1839 DG
Potassium	12	mg/L		1	EPA 200.7	08/28/2013 1839 DG
Sodium	321	mg/L		1	EPA 200.7	08/28/2013 1839 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1205 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	08/22/2013 2242 KV
Electrical Conductivity	1410	µmhos/cm		5	SM 2510B	08/22/2013 2242 KV
Total Dissolved Solids (180)	910	mg/L		10	SM 2540	08/23/2013 716 EC
<b>Data Quality</b>						
Cation Sum	14.35	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	14.25	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	0.35	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	850	mg/L		10	SM 1030E	08/30/2013 1400 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-008  
**ClientSample ID:** 5368-31-35SM  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 4:00:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1504	DG
Arsenic	0.011	mg/L		0.005	EPA 200.8	08/22/2013 2100	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 2100	MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/23/2013 1504	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 2100	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1504	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 2100	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/23/2013 1504	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 2100	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1202	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 2100	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1504	DG
Selenium	0.009	mg/L		0.005	EPA 200.8	08/22/2013 2100	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 2100	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/22/2013 2100	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 2100	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1504	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2258	MS
<b>Metals - Total</b>							
Iron	0.12	mg/L		0.05	EPA 200.7	08/23/2013 1909	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/23/2013 1909	DG

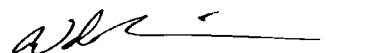
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-008  
**ClientSample ID:** 5368-31-35SM  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 4:00:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	09/15/2013 2059	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/15/2013 2059	SH
Gross Beta	9.0	pCi/L		4	SM 7110B	09/15/2013 2059	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	09/15/2013 2059	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1931	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	08/28/2013 1931	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/05/2013 606	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/05/2013 606	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/08/2013 1414	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/08/2013 1414	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-005  
**ClientSample ID:** 5368-31-35SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 10:00:00 AM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.43	s.u.			Field	08/20/2013 1000
Conductivity	1362	µmhos/cm			Field	08/20/2013 1000
Dissolved Oxygen	1.54	mg/L			Field	08/20/2013 1000
Dissolved Oxygen (pct)	18.0	%			Field	08/20/2013 1000
Turbidity	32.1	NTU			Field	08/20/2013 1000
Temperature	22.4	°C			Field	08/20/2013 1000
Oxygen Reduction Potential (ORP)	+23	mV			Field	08/20/2013 1000
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	708	mg/L		5	SM 2320B	08/22/2013 2206 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	760	mg/L		5	SM 2320B	08/22/2013 2206 KV
Alkalinity, Carbonate as CO <sub>3</sub>	51	mg/L		5	SM 2320B	08/22/2013 2206 KV
Chloride	5	mg/L		1	EPA 300.0	08/22/2013 2051 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	08/22/2013 2206 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1308 RH
Sulfate	80	mg/L		1	EPA 300.0	08/22/2013 2051 AMB
Calcium	3	mg/L		1	EPA 200.7	08/23/2013 1444 DG
Magnesium	2	mg/L		1	EPA 200.7	08/23/2013 1444 DG
Potassium	9	mg/L		1	EPA 200.7	08/23/2013 1444 DG
Sodium	362	mg/L		1	EPA 200.7	08/23/2013 1444 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1202 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	08/22/2013 2206 KV
Electrical Conductivity	1310	µmhos/cm		5	SM 2510B	08/22/2013 2206 KV
Total Dissolved Solids (180)	850	mg/L		10	SM 2540	08/23/2013 713 EC
<b>Data Quality</b>						
Cation Sum	16.29	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	15.96	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	1.01	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	890	mg/L		10	SM 1030E	08/30/2013 1400 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-005  
**ClientSample ID:** 5368-31-35SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 10:00:00 AM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1444	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	08/22/2013 2044	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 2044	MS
Boron	ND	mg/L		0.1	EPA 200.7	08/23/2013 1444	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 2044	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1444	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 2044	MS
Iron	0.05	mg/L		0.05	EPA 200.7	08/23/2013 1444	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 2044	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1156	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 2044	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1444	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/22/2013 2044	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 2044	MS
Uranium	0.0062	mg/L		0.0003	EPA 200.8	08/22/2013 2044	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 2044	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1444	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2241	MS
<b>Metals - Total</b>							
Iron	1.08	mg/L		0.05	EPA 200.7	08/23/2013 1902	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/23/2013 1902	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-005  
**ClientSample ID:** 5368-31-35SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 10:00:00 AM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	8.0	pCi/L		2	SM 7110B	09/15/2013 2059	SH
Gross Alpha Precision (±)	1.8	pCi/L			SM 7110B	09/15/2013 2059	SH
Gross Beta	6.5	pCi/L		3	SM 7110B	09/15/2013 2059	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	09/15/2013 2059	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1931	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	08/28/2013 1931	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/04/2013 2103	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/04/2013 2103	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1600	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1600	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822	MB

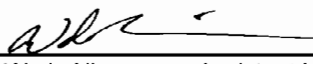
## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-005  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 4:20:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.52	s.u.			Field	08/22/2013 1620
Conductivity	1327	µmhos/cm			Field	08/22/2013 1620
Dissolved Oxygen	1.86	mg/L			Field	08/22/2013 1620
Dissolved Oxygen (pct)	18.6	%			Field	08/22/2013 1620
Turbidity	12.69	NTU			Field	08/22/2013 1620
Temperature	15.0	°C			Field	08/22/2013 1620
Oxygen Reduction Potential (ORP)	-34	mV			Field	08/22/2013 1620
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	423	mg/L		5	SM 2320B	08/26/2013 1824 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	437	mg/L		5	SM 2320B	08/26/2013 1824 KV
Alkalinity, Carbonate as CO <sub>3</sub>	39	mg/L		5	SM 2320B	08/26/2013 1824 KV
Chloride	6	mg/L		1	EPA 300.0	08/26/2013 2123 AMB
Fluoride	0.9	mg/L		0.1	SM 4500FC	08/26/2013 1824 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1418 RH
Sulfate	233	mg/L		1	EPA 300.0	08/26/2013 2123 AMB
Calcium	2	mg/L		1	EPA 200.7	08/26/2013 1830 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/26/2013 1830 DG
Potassium	4	mg/L		1	EPA 200.7	08/26/2013 1830 DG
Sodium	334	mg/L		1	EPA 200.7	08/26/2013 1830 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1219 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	08/26/2013 1824 KV
Electrical Conductivity	1480	µmhos/cm		5	SM 2510B	08/26/2013 1824 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	08/28/2013 1308 EC
<b>Data Quality</b>						
Cation Sum	14.71	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Anion Sum	13.53	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Cation-Anion Balance (± 5%)	4.18	%		0.01	SM 1030E	09/23/2013 1313 WN
Solids, Total Dissolved (Calc)	830	mg/L		10	SM 1030E	09/23/2013 1313 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-005  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 4:20:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1830	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1817	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1817	MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/26/2013 1830	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1817	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1830	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1817	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1830	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1817	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1525	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1817	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1830	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1817	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1817	MS
Uranium	0.0010	mg/L		0.0003	EPA 200.8	08/26/2013 1817	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1817	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1830	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/29/2013 013	MS
<b>Metals - Total</b>							
Iron	0.38	mg/L		0.05	EPA 200.7	08/26/2013 2232	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/26/2013 2232	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-005  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 4:20:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.6	pCi/L		2	SM 7110B	09/17/2013 851	SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	09/17/2013 851	SH
Gross Beta	4.5	pCi/L		3	SM 7110B	09/17/2013 851	SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	09/17/2013 851	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1632	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/03/2013 1632	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/08/2013 248	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/08/2013 248	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1600	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1600	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/11/2013 910	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/11/2013 910	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-006  
**ClientSample ID:** 5368-12-25SM  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 4:45:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.91	s.u.			Field	08/22/2013 1645
Conductivity	1299	µmhos/cm			Field	08/22/2013 1645
Dissolved Oxygen	1.48	mg/L			Field	08/22/2013 1645
Dissolved Oxygen (pct)	14.7	%			Field	08/22/2013 1645
Turbidity	37.1	NTU			Field	08/22/2013 1645
Temperature	15.1	°C			Field	08/22/2013 1645
Oxygen Reduction Potential (ORP)	-110	mV			Field	08/22/2013 1645
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	386	mg/L		5	SM 2320B	08/26/2013 1834 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	363	mg/L		5	SM 2320B	08/26/2013 1834 KV
Alkalinity, Carbonate as CO <sub>3</sub>	53	mg/L		5	SM 2320B	08/26/2013 1834 KV
Chloride	11	mg/L		1	EPA 300.0	08/26/2013 2134 AMB
Fluoride	1.3	mg/L		0.1	SM 4500FC	08/26/2013 1834 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1420 RH
Sulfate	199	mg/L		1	EPA 300.0	08/26/2013 2134 AMB
Calcium	1	mg/L		1	EPA 200.7	08/26/2013 1832 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/26/2013 1832 DG
Potassium	7	mg/L		1	EPA 200.7	08/26/2013 1832 DG
Sodium	302	mg/L		1	EPA 200.7	08/26/2013 1832 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1220 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	08/26/2013 1834 KV
Electrical Conductivity	1380	µmhos/cm		5	SM 2510B	08/26/2013 1834 KV
Total Dissolved Solids (180)	810	mg/L		10	SM 2540	08/28/2013 1309 EC
<b>Data Quality</b>						
Cation Sum	13.39	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Anion Sum	12.25	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Cation-Anion Balance (± 5%)	4.42	%		0.01	SM 1030E	09/23/2013 1313 WN
Solids, Total Dissolved (Calc)	750	mg/L		10	SM 1030E	09/23/2013 1313 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-006  
**ClientSample ID:** 5368-12-25SM  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 4:45:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	08/26/2013 1832	DG
Arsenic	0.009	mg/L		0.005	EPA 200.8	08/26/2013 1823	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1823	MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/26/2013 1832	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1823	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1832	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1823	MS
Iron	0.07	mg/L		0.05	EPA 200.7	08/26/2013 1832	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1823	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1527	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1823	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1832	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1823	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1823	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/26/2013 1823	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1823	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1832	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/29/2013 019	MS
<b>Metals - Total</b>							
Iron	0.92	mg/L		0.05	EPA 200.7	08/26/2013 2235	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/26/2013 2235	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-006  
**ClientSample ID:** 5368-12-25SM  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/22/2013 4:45:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	2.1	pCi/L		2	SM 7110B	09/17/2013 851 SH
Gross Alpha Precision (±)	1.6	pCi/L			SM 7110B	09/17/2013 851 SH
Gross Beta	5.4	pCi/L		3	SM 7110B	09/17/2013 851 SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	09/17/2013 851 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1632 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/03/2013 1632 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/08/2013 549 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/08/2013 549 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/18/2013 736 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/18/2013 736 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/11/2013 910 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/11/2013 910 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/21/2013 4:00:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.15	s.u.			Field	08/21/2013 1600
Conductivity	1366	µmhos/cm			Field	08/21/2013 1600
Dissolved Oxygen	1.39	mg/L			Field	08/21/2013 1600
Dissolved Oxygen (pct)	15.9	%			Field	08/21/2013 1600
Turbidity	13.22	NTU			Field	08/21/2013 1600
Temperature	20.6	°C			Field	08/21/2013 1600
Oxygen Reduction Potential (ORP)	-133	mV			Field	08/21/2013 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	552	mg/L		5	SM 2320B	08/28/2013 1559 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	673	mg/L		5	SM 2320B	08/28/2013 1559 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/28/2013 1559 KV
Chloride	2	mg/L		1	EPA 300.0	08/29/2013 240 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	08/26/2013 1746 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1414 RH
Sulfate	167	mg/L		1	EPA 300.0	08/29/2013 240 AMB
Calcium	34	mg/L		1	EPA 200.7	08/28/2013 1910 DG
Magnesium	17	mg/L		1	EPA 200.7	08/28/2013 1910 DG
Potassium	28	mg/L		1	EPA 200.7	08/28/2013 1910 DG
Sodium	242	mg/L		1	EPA 200.7	08/28/2013 1910 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1215 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	08/26/2013 1746 KV
Electrical Conductivity	1490	µmhos/cm		5	SM 2510B	08/26/2013 1746 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	08/28/2013 1304 EC
<b>Data Quality</b>						
Cation Sum	14.35	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Anion Sum	14.57	meq/L		0.01	SM 1030E	09/23/2013 1313 WN
Cation-Anion Balance (± 5%)	0.73	%		0.01	SM 1030E	09/23/2013 1313 WN
Solids, Total Dissolved (Calc)	820	mg/L		10	SM 1030E	09/23/2013 1313 WN

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

Company: Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

Date Reported 9/27/2013  
Report ID: S1308389001

ProjectName: Kendrick  
Lab ID: S1308389-001  
ClientSample ID: 5368-12-25SA  
COC: 150187

WorkOrder: S1308389  
CollectionDate: 8/21/2013 4:00:00 PM  
DateReceived: 8/23/2013 8:06:00 AM  
FieldSampler: RF  
Matrix: Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1807	DG
Arsenic	0.007	mg/L		0.005	EPA 200.8	08/26/2013 1755	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1755	MS
Boron	0.2	mg/L		0.1	EPA 200.7	08/26/2013 1807	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1755	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1807	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1755	MS
Iron	1.09	mg/L		0.05	EPA 200.7	08/26/2013 1807	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1755	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1517	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1755	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1807	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1755	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1755	MS
Uranium	0.0026	mg/L		0.0003	EPA 200.8	08/26/2013 1755	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1755	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1807	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2352	MS
<b>Metals - Total</b>							
Iron	1.75	mg/L		0.05	EPA 200.7	08/26/2013 2216	DG
Manganese	0.06	mg/L		0.02	EPA 200.7	08/26/2013 2216	DG

## These results apply only to the samples tested.

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/27/2013  
**Report ID:** S1308389001

**ProjectName:** Kendrick  
**Lab ID:** S1308389-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 150187

**WorkOrder:** S1308389  
**CollectionDate:** 8/21/2013 4:00:00 PM  
**DateReceived:** 8/23/2013 8:06:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	4.1	pCi/L		2	SM 7110B	09/16/2013 1827 SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	09/16/2013 1827 SH
Gross Beta	20.9	pCi/L		3	SM 7110B	09/16/2013 1827 SH
Gross Beta Precision (±)	3.1	pCi/L			SM 7110B	09/16/2013 1827 SH
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1418 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/03/2013 1418 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 1443 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 1443 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1145 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1145 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/11/2013 910 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/11/2013 910 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226 MB

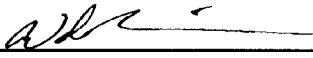
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-004  
**ClientSample ID:** 5268-21-110Z  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 4:00:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.76	s.u.			Field	08/19/2013 1600
Conductivity	1385	µmhos/cm			Field	08/19/2013 1600
Dissolved Oxygen	2.20	mg/L			Field	08/19/2013 1600
Dissolved Oxygen (pct)	23.2	%			Field	08/19/2013 1600
Turbidity	18.96	NTU			Field	08/19/2013 1600
Temperature	15.5	°C			Field	08/19/2013 1600
Oxygen Reduction Potential (ORP)	-39	mV			Field	08/19/2013 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	443	mg/L		5	SM 2320B	08/22/2013 2140 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	433	mg/L		5	SM 2320B	08/22/2013 2140 KV
Alkalinity, Carbonate as CO <sub>3</sub>	53	mg/L		5	SM 2320B	08/22/2013 2140 KV
Chloride	7	mg/L		1	EPA 300.0	08/22/2013 2038 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	08/22/2013 2140 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1307 RH
Sulfate	206	mg/L		1	EPA 300.0	08/22/2013 2038 AMB
Calcium	1	mg/L		1	EPA 200.7	08/23/2013 1441 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/23/2013 1441 DG
Potassium	11	mg/L		1	EPA 200.7	08/23/2013 1441 DG
Sodium	330	mg/L		1	EPA 200.7	08/23/2013 1441 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1201 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	08/22/2013 2140 KV
Electrical Conductivity	1310	µmhos/cm		5	SM 2510B	08/22/2013 2140 KV
Total Dissolved Solids (180)	850	mg/L		10	SM 2540	08/23/2013 712 EC
<b>Data Quality</b>						
Cation Sum	14.69	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	13.34	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	4.80	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	820	mg/L		10	SM 1030E	08/30/2013 1400 JJ

These results apply only to the samples tested.

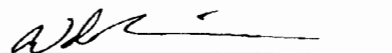
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-004  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 4:00:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1441	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/22/2013 2038	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 2038	MS
Boron	0.1	mg/L		0.1	EPA 200.7	08/23/2013 1441	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 2038	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1441	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 2038	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/23/2013 1441	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 2038	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1154	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 2038	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1441	DG
Selenium	0.008	mg/L		0.005	EPA 200.8	08/22/2013 2038	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 2038	MS
Uranium	0.0287	mg/L		0.0003	EPA 200.8	08/22/2013 2038	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 2038	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1441	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2236	MS
<b>Metals - Total</b>							
Iron	0.42	mg/L		0.05	EPA 200.7	08/23/2013 1900	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/23/2013 1900	DG

These results apply only to the samples tested.

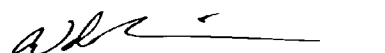
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-004  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 4:00:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	61.6	pCi/L		2	SM 7110B	09/12/2013 810 SH
Gross Alpha Precision (±)	4.3	pCi/L			SM 7110B	09/12/2013 810 SH
Gross Beta	14.8	pCi/L		4	SM 7110B	09/12/2013 810 SH
Gross Beta Precision (±)	2.5	pCi/L			SM 7110B	09/12/2013 810 SH
Radium 226	1.6	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1931 SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	08/28/2013 1931 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/04/2013 1802 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/04/2013 1802 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1600 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1600 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-003  
**ClientSample ID:** 5268-21-11SM  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 3:30:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.97	s.u.			Field	08/19/2013 1530
Conductivity	1287	µmhos/cm			Field	08/19/2013 1530
Dissolved Oxygen	1.35	mg/L			Field	08/19/2013 1530
Dissolved Oxygen (pct)	14.0	%			Field	08/19/2013 1530
Turbidity	3.53	NTU			Field	08/19/2013 1530
Temperature	15.1	°C			Field	08/19/2013 1530
Oxygen Reduction Potential (ORP)	-28	mV			Field	08/19/2013 1530
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	344	mg/L		5	SM 2320B	08/27/2013 1717 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	312	mg/L		5	SM 2320B	08/27/2013 1717 KV
Alkalinity, Carbonate as CO <sub>3</sub>	53	mg/L		5	SM 2320B	08/27/2013 1717 KV
Chloride	17	mg/L		1	EPA 300.0	08/22/2013 2026 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	08/22/2013 2128 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1306 RH
Sulfate	244	mg/L		1	EPA 300.0	08/28/2013 1211 AMB
Calcium	3	mg/L		1	EPA 200.7	08/28/2013 1828 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 1828 DG
Potassium	6	mg/L		1	EPA 200.7	08/28/2013 1828 DG
Sodium	284	mg/L		1	EPA 200.7	08/28/2013 1828 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1200 RH
<b>General Parameters</b>						
pH	9.5	s.u.		0.1	SM 4500 H B	08/22/2013 2128 KV
Electrical Conductivity	1270	µmhos/cm		5	SM 2510B	08/22/2013 2128 KV
Total Dissolved Solids (180)	830	mg/L		10	SM 2540	08/23/2013 711 EC
<b>Data Quality</b>						
Cation Sum	12.65	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	12.50	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	0.62	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	760	mg/L		10	SM 1030E	08/30/2013 1400 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-003  
**ClientSample ID:** 5268-21-11SM  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 3:30:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1439 DG
Arsenic	0.020	mg/L		0.005	EPA 200.8	08/22/2013 2006 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 2006 MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/23/2013 1439 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 2006 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1439 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 2006 MS
Iron	ND	mg/L		0.05	EPA 200.7	08/23/2013 1439 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 2006 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1152 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 2006 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1439 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/22/2013 2006 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 2006 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/22/2013 2006 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 2006 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1439 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2219 MS
<b>Metals - Total</b>						
Iron	0.11	mg/L		0.05	EPA 200.7	08/23/2013 1858 DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/23/2013 1858 DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-003  
**ClientSample ID:** 5268-21-11SM  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/19/2013 3:30:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	09/12/2013 810 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/12/2013 810 SH
Gross Beta	ND	pCi/L		4	SM 7110B	09/12/2013 810 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/12/2013 810 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1931 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	08/28/2013 1931 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/04/2013 1501 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/04/2013 1501 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1600 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1600 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/08/2013 1414 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/08/2013 1414 MB

## These results apply only to the samples tested.

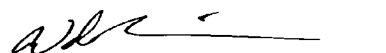
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-003  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 12:30:00 PM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.92	s.u.			Field	08/21/2013 1230
Conductivity	1239	µmhos/cm			Field	08/21/2013 1230
Dissolved Oxygen	2.47	mg/L			Field	08/21/2013 1230
Dissolved Oxygen (pct)	25.1	%			Field	08/21/2013 1230
Turbidity	6.77	NTU			Field	08/21/2013 1230
Temperature	15.0	°C			Field	08/21/2013 1230
Oxygen Reduction Potential (ORP)	-22	mV			Field	08/21/2013 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	409	mg/L		5	SM 2320B	08/28/2013 1543 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	372	mg/L		5	SM 2320B	08/28/2013 1543 KV
Alkalinity, Carbonate as CO <sub>3</sub>	63	mg/L		5	SM 2320B	08/28/2013 1543 KV
Chloride	3	mg/L		1	EPA 300.0	08/29/2013 306 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	08/24/2013 150 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1403 RH
Sulfate	162	mg/L		1	EPA 300.0	08/29/2013 306 AMB
Calcium	1	mg/L		1	EPA 200.7	08/28/2013 1915 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 1915 DG
Potassium	5	mg/L		1	EPA 200.7	08/28/2013 1915 DG
Sodium	265	mg/L		1	EPA 200.7	08/28/2013 1915 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1213 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	08/24/2013 150 KV
Electrical Conductivity	1220	µmhos/cm		5	SM 2510B	08/24/2013 150 KV
Total Dissolved Solids (180)	780	mg/L		10	SM 2540	08/23/2013 1519 EC
<b>Data Quality</b>						
Cation Sum	11.72	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Anion Sum	11.68	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Cation-Anion Balance (± 5%)	0.15	%		0.01	SM 1030E	09/04/2013 1509 JJ
Solids, Total Dissolved (Calc)	680	mg/L		10	SM 1030E	09/04/2013 1509 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-003  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 12:30:00 PM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1608	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/26/2013 1713	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1713	MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/26/2013 1608	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1713	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1608	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1713	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1608	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1713	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1513	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1713	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1608	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1713	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1713	MS
Uranium	0.0125	mg/L		0.0003	EPA 200.8	08/26/2013 1713	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1713	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1608	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2314	MS
<b>Metals - Total</b>							
Iron	0.16	mg/L		0.05	EPA 200.7	08/26/2013 2008	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/26/2013 2008	DG

## These results apply only to the samples tested.

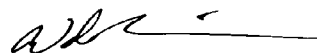
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-003  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 12:30:00 PM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	23.6	pCi/L		2	SM 7110B	09/16/2013 1827	SH
Gross Alpha Precision (±)	2.8	pCi/L			SM 7110B	09/16/2013 1827	SH
Gross Beta	6.4	pCi/L		3	SM 7110B	09/16/2013 1827	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	09/16/2013 1827	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1418	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/03/2013 1418	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 841	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 841	MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1145	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1145	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553	SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- 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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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
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Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-004  
**ClientSample ID:** 5268-12-01SM  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 1:00:00 PM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.62	s.u.			Field	08/21/2013 1300
Conductivity	1756	µmhos/cm			Field	08/21/2013 1300
Dissolved Oxygen	1.62	mg/L			Field	08/21/2013 1300
Dissolved Oxygen (pct)	17.3	%			Field	08/21/2013 1300
Turbidity	4.41	NTU			Field	08/21/2013 1300
Temperature	18.7	°C			Field	08/21/2013 1300
Oxygen Reduction Potential (ORP)	-59	mV			Field	08/21/2013 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	194	mg/L		5	SM 2320B	08/28/2013 1551 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	87	mg/L		5	SM 2320B	08/28/2013 1551 KV
Alkalinity, Carbonate as CO <sub>3</sub>	74	mg/L		5	SM 2320B	08/28/2013 1551 KV
Chloride	17	mg/L		1	EPA 300.0	08/29/2013 318 AMB
Fluoride	1.8	mg/L		0.1	SM 4500FC	08/24/2013 203 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1411 RH
Sulfate	530	mg/L		1	EPA 300.0	08/29/2013 318 AMB
Calcium	2	mg/L		1	EPA 200.7	08/28/2013 1917 DG
Magnesium	ND	mg/L		1	EPA 200.7	08/28/2013 1917 DG
Potassium	8	mg/L		1	EPA 200.7	08/28/2013 1917 DG
Sodium	360	mg/L		1	EPA 200.7	08/28/2013 1917 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	08/26/2013 1214 RH
<b>General Parameters</b>						
pH	10.0	s.u.		0.1	SM 4500 H B	08/24/2013 203 KV
Electrical Conductivity	1780	µmhos/cm		5	SM 2510B	08/24/2013 203 KV
Total Dissolved Solids (180)	1160	mg/L		10	SM 2540	08/23/2013 1520 EC
<b>Data Quality</b>						
Cation Sum	15.96	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Anion Sum	15.48	meq/L		0.01	SM 1030E	09/04/2013 1509 JJ
Cation-Anion Balance (± 5%)	1.53	%		0.01	SM 1030E	09/04/2013 1509 JJ
Solids, Total Dissolved (Calc)	1030	mg/L		10	SM 1030E	09/04/2013 1509 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-004  
**ClientSample ID:** 5268-12-01SM  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 1:00:00 PM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/26/2013 1610	DG
Arsenic	0.014	mg/L		0.005	EPA 200.8	08/26/2013 1745	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/26/2013 1745	MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/26/2013 1610	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/26/2013 1745	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/26/2013 1610	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/26/2013 1745	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/26/2013 1610	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/26/2013 1745	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1515	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/26/2013 1745	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/26/2013 1610	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/26/2013 1745	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/26/2013 1745	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/26/2013 1745	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/26/2013 1745	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/26/2013 1610	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2346	MS
<b>Metals - Total</b>							
Iron	0.08	mg/L		0.05	EPA 200.7	08/26/2013 2018	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/26/2013 2018	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308384001

**ProjectName:** Kendrick  
**Lab ID:** S1308384-004  
**ClientSample ID:** 5268-12-01SM  
**COC:** 150176

**WorkOrder:** S1308384  
**CollectionDate:** 8/21/2013 1:00:00 PM  
**DateReceived:** 8/22/2013 7:57:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	09/16/2013 1827 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/16/2013 1827 SH
Gross Beta	ND	pCi/L		3	SM 7110B	09/16/2013 1827 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	09/16/2013 1827 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/03/2013 1418 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/03/2013 1418 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/07/2013 1142 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/07/2013 1142 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/06/2013 1145 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/06/2013 1145 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/11/2013 910 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/11/2013 910 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 1226 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 1226 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-007  
**ClientSample ID:** 5268-12-01SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 2:20:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.32	s.u.			Field	08/20/2013 1420
Conductivity	1305	µmhos/cm			Field	08/20/2013 1420
Dissolved Oxygen	1.50	mg/L			Field	08/20/2013 1420
Dissolved Oxygen (pct)	18.3	%			Field	08/20/2013 1420
Turbidity	13.20	NTU			Field	08/20/2013 1420
Temperature	23.9	°C			Field	08/20/2013 1420
Oxygen Reduction Potential (ORP)	+61	mV			Field	08/20/2013 1420
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	527	mg/L		5	SM 2320B	08/22/2013 2230 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	563	mg/L		5	SM 2320B	08/22/2013 2230 KV
Alkalinity, Carbonate as CO <sub>3</sub>	40	mg/L		5	SM 2320B	08/22/2013 2230 KV
Chloride	4	mg/L		1	EPA 300.0	08/22/2013 2116 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	08/22/2013 2230 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/26/2013 1318 RH
Sulfate	129	mg/L		1	EPA 300.0	08/22/2013 2116 AMB
Calcium	3	mg/L		1	EPA 200.7	08/23/2013 1451 DG
Magnesium	2	mg/L		1	EPA 200.7	08/23/2013 1451 DG
Potassium	7	mg/L		1	EPA 200.7	08/23/2013 1451 DG
Sodium	328	mg/L		1	EPA 200.7	08/23/2013 1451 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/26/2013 1204 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	08/22/2013 2230 KV
Electrical Conductivity	1250	µmhos/cm		5	SM 2510B	08/22/2013 2230 KV
Total Dissolved Solids (180)	820	mg/L		10	SM 2540	08/23/2013 715 EC
<b>Data Quality</b>						
Cation Sum	14.72	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Anion Sum	13.37	meq/L		0.01	SM 1030E	08/30/2013 1400 JJ
Cation-Anion Balance (± 5%)	4.80	%		0.01	SM 1030E	08/30/2013 1400 JJ
Solids, Total Dissolved (Calc)	790	mg/L		10	SM 1030E	08/30/2013 1400 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-007  
**ClientSample ID:** 5268-12-01SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 2:20:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/23/2013 1451	DG
Arsenic	0.014	mg/L		0.005	EPA 200.8	08/22/2013 2055	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/22/2013 2055	MS
Boron	0.3	mg/L		0.1	EPA 200.7	08/23/2013 1451	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/22/2013 2055	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/23/2013 1451	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/22/2013 2055	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/23/2013 1451	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/22/2013 2055	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/27/2013 1200	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/22/2013 2055	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/23/2013 1451	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/22/2013 2055	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/22/2013 2055	MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	08/22/2013 2055	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/22/2013 2055	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/23/2013 1451	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	08/28/2013 2252	MS
<b>Metals - Total</b>							
Iron	0.42	mg/L		0.05	EPA 200.7	08/23/2013 1907	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/23/2013 1907	DG

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 20 of 24



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 9/26/2013  
**Report ID:** S1308351001

**ProjectName:** Kendrick  
**Lab ID:** S1308351-007  
**ClientSample ID:** 5268-12-01SA  
**COC:** 150175

**WorkOrder:** S1308351  
**CollectionDate:** 8/20/2013 2:20:00 PM  
**DateReceived:** 8/21/2013 7:56:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	09/15/2013 2059 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	09/15/2013 2059 SH
Gross Beta	5.1	pCi/L		4	SM 7110B	09/15/2013 2059 SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	09/15/2013 2059 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	08/28/2013 1931 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	08/28/2013 1931 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/05/2013 305 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/05/2013 305 MK
Thorium 230	ND	pCi/L		0.2	ACW10	09/08/2013 1414 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/08/2013 1414 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/10/2013 1553 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/10/2013 1553 SH
Thorium 230	ND	pCi/L		0.2	ACW10	09/24/2013 822 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/24/2013 822 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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\*No Sample

WWCENGINEERING

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

## SAMPLING INFORMATION

Sampling Point 5367-34-06 DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145

Sample ID# \_\_\_\_\_ Date Sampled / / Time \_\_\_\_\_ am pm

Describe Sampling Point GW monitoring well

Well Depth 540 ft below MP Depth to Water (below MP) 84.35 ft Casing Diameter 5 in

Date 10/25/13 Time 1130 am pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: no sample - water level only

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5367-34-0602 Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145  
Sample ID# 34-0602 Date Sampled 10 125 13 Time 1230 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 320 ft below MP Depth to Water (below MP) 65.71 ft Casing Diameter 5 in  
Date 10 125 13 Time 1120 ☒ am ☐ pm Casing Volume 254 <sup>3</sup>/<sub>g</sub>  
762 al

At least 3+ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1200									↓	20+
1230	9.39	1909	11.8	4.91	-157	3.96	36.5	—	800	20+

Pumping Start Time 1150 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

WCF

COC# 151964

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5367-34-06SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 34-06SM Date Sampled 10/25/13 Time 1250 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 220 ft below MP Depth to Water (below MP) 59.17 ft Casing Diameter 5 in  
Date 10/25/13 Time 1125 ☒ am ☐ pm Casing Volume 160X3 gal  
480

At least 3+ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1210	—	—	—	—	—	—	—	—	—	15
1250	9.60	1907	11.3	8.71	-116	5.05	46.3	—	900	15

Pumping Start Time 1150 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

KCF

COC# 151964

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5367-34-065A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 34-065A Date Sampled 10/22/13 Time 1340 am pm  
Describe Sampling Point GW monitoring well

Well Depth 55 ft below MP Depth to Water (below MP) 21.29 ft Casing Diameter 5 in  
Date 10/22/13 Time 1300 am (pm) Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump

Bladder (low flow)

Tap

Bailer

Pump intake or bailer set at 50 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1330	8.98	1951	14.2	3.77	—	—	—	—	↓	150 mL / 30 SEC
1340	8.88	2160	13.7	2.05	-177	1.16	11.2	—	≈ 3.5	↓

Pumping Start Time 1310 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor

LCF

COC# 151972

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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\* NO Sample

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

## SAMPLING INFORMATION

Sampling Point 5368-43-12DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 780 ft below MP Depth to Water (below MP) 252.02 ft Casing Diameter 5 in  
Date 10 / 26 / 13 Time 0845 (am) pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-1202 Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 43-1202 Date Sampled 10/26/13 Time 1015 (am) pm

Describe Sampling Point GW monitoring well

Well Depth 615 ~~246.08~~ ft below MP Depth to Water (below MP) 246.08 ~~615~~ ft Casing Diameter 5 in

Date 10/26/13 Time 0835 (am) pm Casing Volume 369x3 = 1107 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>0910</u>	_____	_____	_____	_____	_____	_____	_____	_____	↓	<u>16</u>
<u>1015</u>	<u>9.54</u>	<u>3070</u>	<u>12.1</u>	<u>0.16</u>	<u>-51</u>	<u>2.88</u>	<u>26.5</u>	_____	<u>1200</u>	<u>16</u>

Pumping Start Time 0900 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor

LCF

COC# 151970

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-125M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-125M Date Sampled 10/26/13 Time 1000 ☒ am ☐ pm  
Describe Sampling Point GW monitoring well

Well Depth 480 ft below MP Depth to Water (below MP) 194.08 ft Casing Diameter 5 in  
Date 10/26/13 Time 0840 ☒ am ☐ pm Casing Volume 286 x 3 gal  
858

At least 3+ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0915	—	—	—	—	—	—	—	—	↓	15
1000	9.61	1806	11.6	2.03	-102	2.67	24.6	—	900	15

Pumping Start Time 0900 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

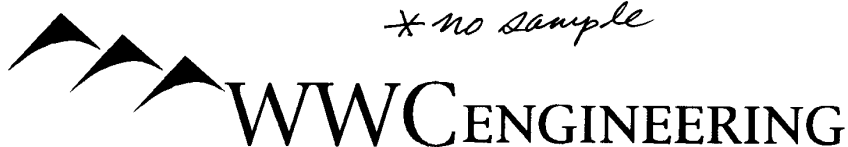
LCF

COC# 151964

Form completed by: David Fuller

Witnessed by: \_\_\_\_\_

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\* no sample

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

## SAMPLING INFORMATION

Sampling Point 5368-33-14DM Project Kendricks

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm

Describe Sampling Point GW monitoring well

Well Depth 910 ft below MP Depth to Water (below MP) 226.76 ft Casing Diameter 5 in

Date 10 / 26 / 13 Time 1115 (am) pm Casing Volume \_\_\_\_\_ g al

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - water level only

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-33-140Z Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 33-140Z Date Sampled 10 / 26 / 13 Time 1245 am ☒ pm  
 Describe Sampling Point GW monitoring well

Well Depth 760 ft below MP Depth to Water (below MP) 216.67 ft Casing Diameter 5 in  
 Date 10 / 26 / 13 Time 1105 ☒ am ☐ pm Casing Volume 543X3 gal  
1630

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
 \_\_\_\_\_ m  
 x 0.00223  
 \_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1140</u>	—	—	—	—	—	—	—	—	↓	<u>20.0</u>
<u>1245</u>	<u>9.68</u>	<u>1603</u>	<u>13.9</u>	<u>0.60</u>	<u>-39</u>	<u>2.31</u>	<u>22.4</u>	—	<u>1700</u>	<u>20.0</u>

Pumping Start Time 1120 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 151970

Form completed by: Rod Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-33-145M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 33-145M Date Sampled 10/26/13 Time 1400 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 630 ft below MP Depth to Water (below MP) 174.20 ft Casing Diameter 5 in  
Date 10/26/13 Time 1110 am ☒ pm Casing Volume 456 x 3  
1368 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1130	—	—	—	—	—	—	—	—	—	11.0
1230	—	—	—	—	—	—	—	—	770	7.0
1400	9.79	1465	13.7	1.89	-90	2.65	25.6	—	1400	7.0

Pumping Start Time 1120 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor

LCF

COC # 151970

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-33-14SA Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 33-14SA Date Sampled 10/24/13 Time 1530 am pm

Describe Sampling Point GW monitoring well

Well Depth 65 ft below MP Depth to Water (below MP) 31.20 ft Casing Diameter 5 in

Date 10/24/13 Time 1450 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 60 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1520	8.20	865	13.1	6.38	—	—	—	—	↓	150 mL / 30 sec
1530	8.24	867	12.6	3.73	-45	2.77	27.1	—	≈ 3.5	↓

Pumping Start Time 1500 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 151963

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-41-23DM Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm  
 Describe Sampling Point GW monitoring well

Well Depth 940 ft below MP Depth to Water (below MP) 303.65 ft Casing Diameter 5 in  
 Date 10 / 26 / 13 Time 1500 am (pm) Casing Volume \_\_\_\_\_ g al

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp m  
 x 0.00223  
 \_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: NO Sample - Water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-230Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-230Z Date Sampled 10/27/13 Time 1200 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 800 ft below MP Depth to Water (below MP) 271.09 ft Casing Diameter 5 in  
Date 10/26/13 Time 1445 am ☒ pm Casing Volume 529 x 3 = 1587 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0900										10.0
1000	9.47	1537	13.0	44.0					900	6.0
1200	9.44	1564	13.5	14.63	-89	2.04	19.6		1620	6.0

Pumping Start Time 0830 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC # 151970

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-41-23 SM Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 41-238M Date Sampled 10/26/13 Time 1050 (am) pm  
 Describe Sampling Point GW monitoring well

Well Depth 710 ft below MP Depth to Water (below MP) 235.05 ft Casing Diameter 5 in  
 Date 10/26/13 Time 1450 am (pm) Casing Volume 475x3 gal  
1425 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
 m  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0910									↓	12.0
0930	9.42	1565	12.8	7.77					720	9.0
1050	9.42	1580	12.8	3.93	-123	2.46	23.3		1440	9.0

Pumping Start Time 0830 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 151970

Form completed by: Rod Fuller

Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5368-41-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-235A Date Sampled 10/24/13 Time 1640 am pm  
Describe Sampling Point GW monitoring well

Well Depth 90 ft below MP Depth to Water (below MP) 83.43 ft Casing Diameter 5 in  
Date 10/24/13 Time 1600 am (pm) Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 85 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1630	7.69	1247	13.4	10.75	—	—	—	—	↓	150mL/30sec
1640	7.72	1243	12.9	4.51	+33	2.37	22.4	—	≈ 3.5	↓

Pumping Start Time 1610 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 151963

Form completed by: [Signature] Witnessed by: \_\_\_\_\_



*No Sample*

WWCENGINEERING

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## SAMPLING INFORMATION

Sampling Point 5368-24-12DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm

Describe Sampling Point 6W monitoring well

Well Depth 900 ft below MP Depth to Water (below MP) 312.43 ft Casing Diameter 5 in

Date 10 / 27 / 13 Time 1245 am pm Casing Volume \_\_\_\_\_ g al

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-24-120Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 5368-24-120Z Date Sampled 10 127 13 Time 1515 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 780 ft below MP Depth to Water (below MP) 307.28 ft Casing Diameter 5 in  
Date 10 127 13 Time 1235 am ☒ pm Casing Volume 473 x 3 = 1420 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1310										10.0
1420	9.56	1935	13.7	0.79						10.0
1515	9.53	1917	13.5	0.68	-53	2.44	23.5		1450	10.0

Pumping Start Time 1250 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 151970

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-24-125M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 24-125M Date Sampled 10 127 13 Time 1430 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 600 ft below MP Depth to Water (below MP) 247.24 ft Casing Diameter 5 in  
Date 10 127 13 Time 1240 am ☒ pm Casing Volume 353 gal  
1059

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Dubler 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1320	—	—	—	—	—	—	—	—	↓	11.0
1330	9.43	1449	13.1	32.4	—	—	—	—	↓	11.0
1430	9.48	1457	12.9	19.3	-96	2.83	27.3	—	1100	11.0

Pumping Start Time 1250 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water slightly turbid - no odor

LCF

COC# 151970

Form completed by: Rod Fuller

Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-24-12SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 24-12SA Date Sampled 10 / 22 / 13 Time 1510 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 125 ft below MP Depth to Water (below MP) 79.47 ft Casing Diameter 5 in  
Date 10 / 22 / 13 Time 1430 am ☒ pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump

Bladder (low flow)

Tap

Bailer \_\_\_\_\_

Pump intake or bailer set at 120 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1500	9.84	1158	13.2	7.44	—	—	—	—	↓	150ml/30 sec.
1510	9.73	1133	12.6	6.11	-103	1.56	14.8	—	≈ 3.5	↓

Pumping Start Time 1445 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

hcf

COC# 151972

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



\* no sample

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## SAMPLING INFORMATION

Sampling Point 5368-43-24DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 / \_\_\_\_\_ Time \_\_\_\_\_ am pm

Describe Sampling Point \_\_\_\_\_

Well Depth 750 ft below MP Depth to Water (below MP) 229.94 ft Casing Diameter 5 in

Date 10/25/13 Time 1340 am pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: no sample - water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-240Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 43-240Z Date Sampled 10 125 13 Time 1220 <sup>1515</sup> am (pm)  
Describe Sampling Point GW monitoring well

Well Depth 590 ft below MP Depth to Water (below MP) 234.05 ft Casing Diameter 5 in  
Date 10 125 13 Time 1330 am (pm) Casing Volume 358X3 = 1068 gal

At least 3+ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1410										15
1515	9.53	1946	13.0	9.39	-116	2.80	26.6		<del>1125</del> 1125	15

Pumping Start Time 1400 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC # 151964

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-43-245M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145  
Sample ID# 43-245M Date Sampled 10/25/13 Time 1630 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 485 ft below MP Depth to Water (below MP) 145.02 ft Casing Diameter 5 in  
Date 10/25/13 Time 1335 am ☒ pm Casing Volume 340 x 3 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>1415</u>	—	—	—	—	—	—	—	—	↓	<u>7.0</u>
<u>1550</u>	<u>9.24</u>	<u>1877</u>	<u>12.7</u>	<u>4.42</u>	—	—	—	—	↓	<u>7.0</u>
<u>1630</u>	<u>9.26</u>	<u>2020</u>	<u>12.8</u>	<u>1.72</u>	<u>-142</u>	<u>1.84</u>	<u>17.6</u>	—	<u>1050</u>	<u>7.0</u>

Pumping Start Time 1400 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 151964

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5368-43-24 SA Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# 43-24 SA Date Sampled 10 / 24 / 13 Time 1040 am pm

Describe Sampling Point GW monitoring well

Well Depth 45 ft below MP Depth to Water (below MP) 31.23 ft Casing Diameter 5 in

Date 10 / 24 / 13 Time 1010 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 40 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1030	8.28	908	9.6	7.76	—	—	—	—	↓	150mL/30sec
1040	8.31	898	9.5	5.45	+1	3.28	29.2	—	≈3.5	↓

Pumping Start Time 1015 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCP

COC# 151963

Form completed by: David Fuller Witnessed by: \_\_\_\_\_

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*X NO Sample*

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## SAMPLING INFORMATION

Sampling Point 5368-32-23DM Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm

Describe Sampling Point (SW) monitoring well

Well Depth 1140 ft below MP Depth to Water (below MP) 371.54 ft Casing Diameter 5 in

Date 10 / 24 / 13 Time \_\_\_\_\_ am pm Casing Volume \_\_\_\_\_ g al

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - Water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-32-230Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 32-230Z Date Sampled 10/25/13 Time 1040 am pm  
Describe Sampling Point GW monitoring well

Well Depth 910 ft below MP Depth to Water (below MP) 356.8 ft Casing Diameter 5 in  
Date 10/24/13 Time 1410 am pm Casing Volume 553X3 = 1659 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0800	—	—	—	—	—	—	—	—	↓	9.0
0930	9.83	1474	13.2	10.93	—	—	—	—	↓	9.0
1040	9.70	1471	13.2	8.76	-103	2.04	19.4	—	1710	9.0

Pumping Start Time 0730 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor

LCF

COC # 151964

Form completed by: Rod Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-32-239M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 32-239M Date Sampled 10 125 13 Time 1015 (am/pm)  
Describe Sampling Point GW monitoring well

Well Depth 750 ft below MP Depth to Water (below MP) 317.37 ft Casing Diameter 5 in  
Date 10 124 13 Time 1415 am/pm Casing Volume 433X3 gal  
1300 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 UA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0810	—	—	—	—	—	—	—	—	↓	8.0
0900	9.76	1490	12.6	3.54	—	—	—	—	↓	8.0
1015	9.73	1526	12.7	0.97	-152	2.46	23.6	—	1320	8.0

Pumping Start Time 0730 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

hCF

COC # 151964

Form completed by: Red Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-32-235A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 130 ft below MP Depth to Water (below MP) 127.86 ft Casing Diameter 5 in  
Date 10 / 24 / 13 Time 1420 am (pm) Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: no sample - not enough water to sample

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



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## SAMPLING INFORMATION

Sampling Point 5368 - 41-36 DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled / / Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 1020 ft below MP Depth to Water (below MP) 383.13 ft Casing Diameter \_\_\_\_\_ in  
Date 10 122 113 Time 0805 (am) pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: \_\_\_\_\_

Form completed by: \_\_\_\_\_ Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-360Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-360Z Date Sampled 10 122 113 Time 1200 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 720 ft below MP Depth to Water (below MP) 360.85 ft Casing Diameter 5 in  
Date 10 122 113 Time 0755 ☒ am ☐ pm Casing Volume 360 x 3 = 1080 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0845	—	—	—	—	—	—	—	—	125	5.0
1100	9.46	1619	12.1	3.39	—	—	—	—	800	5.0
1200	9.49	1634	12.3	1.56	-44	1.73	16.0	—	1100	5.0

Pumping Start Time 0820 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 151972

Form completed by: [Signature]

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-41-365M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 41-365M Date Sampled 10/22/13 Time 1110 (am) pm  
Describe Sampling Point 6W monitoring well

Well Depth 585 ft below MP Depth to Water (below MP) 318.97 ft Casing Diameter 5 in  
Date 10/22/13 Time 0800 (am) pm Casing Volume 266 x 3 = 798 gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0850										6.0
0855	— Ran out of water — Let recharge — started pump @ 1100 —									6.0
1110	10.21	1523	11.1	263	-93	2.34	21.3			6.0

Pumping Start Time 0820 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - no 3 bore volumes pumped, due to low water production in well  
HCF - CDC # 151972

Form completed by: Joe Fuller Witnessed by: \_\_\_\_\_

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\* no sample

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## SAMPLING INFORMATION

Sampling Point 5368-41-365A Project Kendrick

Location \_\_\_\_\_ W.O.# 2012145-24

Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm

Describe Sampling Point GW monitoring well

Well Depth 120 ft below MP Depth to Water (below MP) Dry ft Casing Diameter 5 in

Date 10 / 22 / 13 Time 0810 (am) pm Casing Volume \_\_\_\_\_ g al

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Well is dry

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-31-35 DM Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm  
 Describe Sampling Point GW monitoring well

Well Depth 1200 ft below MP Depth to Water (below MP) 444.86 ft Casing Diameter 5 in  
 Date 10 / 23 / 13 Time 0810 (am) pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
 m  
 x 0.00223  
 cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-31-350Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-350Z Date Sampled 10/23/13 Time 1105 (am) pm  
Describe Sampling Point GW Monitoring Well

Well Depth 990 ft below MP Depth to Water (below MP) 446.15 ft Casing Diameter 5 in  
Date 10/23/13 Time 0800 (am) pm Casing Volume 544 x 3 = 1632 gal

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0900	—	—	—	—	—	—	—	—	↓	10.0
1030	9.59	1410	13.5	3.59	—	—	—	—	↓	10.0
1105	9.58	1422	13.6	1.20	-93	2.20	21.4	—	1650	10.0

Pumping Start Time 0820 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water Clear - no odor

LCF

COC# 151971

Form completed by: Rod Fulker Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-31-355M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-355M Date Sampled 10/23/13 Time 1200 am pm  
Describe Sampling Point GW monitoring well

Well Depth 875 ft below MP Depth to Water (below MP) 435.12 ft Casing Diameter 5 in  
Date 10/23/13 Time 0805 (am) pm Casing Volume 440x3 = 1320 gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0850									90	3.0
1015	10.17	1370	13.2	7.91					303	2.5
1130	10.05	1418	13.1	2.49					490	2.5
1200	10.00	1417	13.2	2.31	-108	2.04	19.4		580	2.5

Pumping Start Time 0820 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

\* Comments: Water clear - no odor - no 3 bore volumes -  
Sampled based on consistent field par.  
LCF, CDC # 151971

Form completed by: Bob Fulmer Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5368-31-35SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 31-35SA Date Sampled 10/23/13 Time 0940 am pm  
Describe Sampling Point GW monitoring well

Well Depth 130 ft below MP Depth to Water (below MP) 102.90 ft Casing Diameter 5 in  
Date 10/23/13 Time 0815 am pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump

Bladder (low flow)

Tap

Bailer

Pump intake or bailer set at 125 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0925	9.35	1466	9.3	22.9	—	—	—	—	↓	150ml/30sec
0940	9.47	1434	9.9	18.07	-155	1.64	14.4	—	23.5	↓

Pumping Start Time 0910 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water slightly turbid - no odor

LCF

COL# 151971

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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\* no sample

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## SAMPLING INFORMATION

Sampling Point 5368-12-25DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled 1 / 1 Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 1180 ft below MP Depth to Water (below MP) 388.78 ft Casing Diameter 5 in  
Date 10 / 24 / 13 Time 0800 (am) pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-12-250Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-250Z Date Sampled 10/24/13 Time 1235 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 890 ft below MP Depth to Water (below MP) 381.98 ft Casing Diameter 5 in  
Date 10/24/13 Time 0750 am ☒ pm Casing Volume 508 x 3 = 1524 gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>0845</u>									↓	<u>6.0</u>
<u>1130</u>	<u>9.66</u>	<u>1441</u>	<u>13.1</u>	<u>14.11</u>					↓	<u>6.0</u>
<u>1235</u>	<u>9.61</u>	<u>1429</u>	<u>13.2</u>	<u>20.7</u>	<u>-126</u>	<u>2.52</u>	<u>24.2</u>		<u>1530</u>	<u>6.0</u>

Pumping Start Time 0820 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water slightly turbid - no odor

HCF

COC # 151963

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-12-25SM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-25SM Date Sampled 10/24/13 Time 1340 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 790 ft below MP Depth to Water (below MP) 374.30 ft Casing Diameter 5 in  
Date 10/24/13 Time 0755 am ☒ pm Casing Volume 416x3 = 1248 gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
0850	—	—	—	—	—	—	—	—	—	6.0
1000	—	—	—	—	—	—	—	—	600	3.0
1120	9.96	1333	13.0	28.1	—	—	—	—	840	3.0
1340	9.85	1353	13.8	12.22	-115	2.85	27.8	—	1260	3.0

Pumping Start Time 0820 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC# 151963

Form completed by: Rod Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5368-12-25SA Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-25SA Date Sampled 10/24/13 Time 0940 am pm  
Describe Sampling Point GW monitoring well

Well Depth 100 ft below MP Depth to Water (below MP) 68.24 ft Casing Diameter 5 in  
Date 10/24/13 Time 0805 (am) pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 90 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
<u>0920</u>	<u>8.25</u>	<u>1434</u>	<u>8.9</u>	<u>14.27</u>	—	—	—	—	↓	<u>150ml/30sec</u>
<u>0940</u>	<u>8.31</u>	<u>1427</u>	<u>8.8</u>	<u>13.85</u>	<u>-89</u>	<u>1.77</u>	<u>15.5</u>	—	<u>~3.5</u>	↓

Pumping Start Time 0910 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 151963

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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*\* No Sample*  
**WWCENGINEERING**

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## SAMPLING INFORMATION

Sampling Point 5268-21-11DM Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# \_\_\_\_\_ Date Sampled / / Time \_\_\_\_\_ am pm  
Describe Sampling Point \_\_\_\_\_

Well Depth 1200 ft below MP Depth to Water (below MP) 392.82 ft Casing Diameter 5 in  
Date 10 '21 '13 Time 1040 am pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No Sample - Water Level only

Form completed by: \_\_\_\_\_

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-21-11 0Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 21-110Z Date Sampled 10/21/13 Time 1630 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 1025 ft below MP Depth to Water (below MP) 412.10 ft Casing Diameter 5 in  
Date 10/21/13 Time 1030 ☒ am ☐ pm Casing Volume 613 x 3 = 1840 gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1300	9.96	1398	13.7	7.86	—	—	—	—	360	3.0
1530	9.80	1399	13.7	27.6	—	—	—	—	<del>630</del> 630	3.0
1630	9.81	1396	13.5	21.8	-58	1.97	18.7	—	810	3.0

Pumping Start Time 1100 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water turbid - no odor - no 3 casings evacuated, but sampled based on consistent field par.  
HCF - COC #151962

Form completed by: Bob Fulmer Witnessed by: \_\_\_\_\_

## SAMPLING INFORMATION

Sampling Point 5268-21-115M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 21-115M Date Sampled 10/21/13 Time 1610 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 850 ft below MP Depth to Water (below MP) 347.05 ft Casing Diameter 5 in  
Date 10/21/13 Time 1035 ☒ am pm Casing Volume 503 x 3 gal  
1509

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1330	10.27	1383	13.0	6.10	—	—	—	—	750	5.0
1500	9.98	1369	13.2	5.13	—	—	—	—	1200	5.0
1600	9.97	1368	13.0	5.32	-57	1.80	17.1	—	1550	5.0

Pumping Start Time 1100 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor -

LCF

COC# 151962

ImL Quote# 456

Form completed by: Rod Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-21-119A Project Kendrick  
Location \_\_\_\_\_ W.O.# \_\_\_\_\_  
Sample ID# \_\_\_\_\_ Date Sampled \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_\_ am pm  
Describe Sampling Point GW monitoring well

Well Depth 75 ft below MP Depth to Water (below MP) 52.52 ft Casing Diameter \_\_\_\_\_ in  
Date 10 / 21 / 13 Time 1045 (am) pm Casing Volume \_\_\_\_\_ gal

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample due to high pH - water level only

Form completed by: Red Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-12-01DM Project Kendrick  
 Location \_\_\_\_\_ W.O.# 2012145-24  
 Sample ID# 12-01DM Date Sampled 1 / 1 / \_\_\_\_\_ Time \_\_\_\_\_ am pm  
 Describe Sampling Point \_\_\_\_\_

Well Depth 1050 ft below MP Depth to Water (below MP) 325.30 ft Casing Diameter 5 in  
 Date 10/23/13 Time 1255 am (pm) Casing Volume \_\_\_\_\_ g al

At least \_\_\_\_\_ bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (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 \_\_\_\_\_

### DISCHARGE RATE

gp  
m

x 0.00223

cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (umhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: No sample - water level only

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-12-010Z Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-010Z Date Sampled 10 123 113 Time 1615 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 845 ft below MP Depth to Water (below MP) 329.28 ft Casing Diameter 5 in  
Date 10 123 113 Time 1245 am ☒ pm Casing Volume 515X3 gal  
1545

At least 3 bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1530	9.90	1262	13.3	4.36	—	—	—	—	↓	8.0
1615	9.87	1242	13.2	2.83	-68	1.97	18.9	—	1560	8.0

Pumping Start Time 1300 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: Water clear - no odor

LCF

COC# 151971

Form completed by: Bob Fuller

Witnessed by: \_\_\_\_\_

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## SAMPLING INFORMATION

Sampling Point 5268-12-019M Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-019M Date Sampled 10/23/13 Time 1500 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 715 ft below MP Depth to Water (below MP) 320.65 ft Casing Diameter 5 in  
Date 10/23/13 Time 1250 am ☒ pm Casing Volume \_\_\_\_\_ gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at \_\_\_\_\_ ft below MP.

Tubing (type: Rubber 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gp  
m  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1430	10.67	1870	12.6	2.63	—	—	—	—	X	<del>0.25</del>
1500	10.73	1942	13.3	12.59	-66	2.29	21.7	—	X	0.25

Pumping Start Time \_\_\_\_\_ WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water slightly turbid - no odor - no 3 bore volumes remove - sampled based on consistent field parameters.  
LCE - COC# 151971

Form completed by: Bob Fuller Witnessed by: \_\_\_\_\_



## SAMPLING INFORMATION

Sampling Point 5268-12-015A Project Kendrick  
Location \_\_\_\_\_ W.O.# 2012145-24  
Sample ID# 12-015A Date Sampled 10/23/13 Time 1420 am ☒ pm  
Describe Sampling Point GW monitoring well

Well Depth 95 ft below MP Depth to Water (below MP) 54.05 ft Casing Diameter 5 in  
Date 10/23/13 Time 1300 am ☒ pm Casing Volume NA gal

At least NA bore volumes have been evacuated before sampling

Sampling method: Submersible pump Bladder (low flow)

Tap \_\_\_\_\_ Bailer \_\_\_\_\_

Pump intake or bailer set at 90 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 NA

### DISCHARGE RATE

\_\_\_\_\_ gpm  
x 0.00223  
\_\_\_\_\_ cfs

## EVACUATION / STABILIZATION TEST DATA

Time	PH (units)	Temperature Corrected Conductance (µmhos/cm)	Temp. (°C)	Turbidity (NTU)	ORP (+/-)	DO (mg/l)	DO (%)	Water Level (0.01 ft)	Volume of Water Removed (gallons)	Pumping Rate (gpm)
1410	9.41	1353	11.4	9.31	—	—	—	—	1	150 mL/30 sec
1420	9.46	1339	11.2	7.13	-49	1.47	13.4	—	~3.5	↓

Pumping Start Time 1355 WL \_\_\_\_\_ Pumping End Time \_\_\_\_\_ WL \_\_\_\_\_

Comments: water clear - no odor

LCF

COC # 151971

Form completed by: [Signature] Witnessed by: \_\_\_\_\_

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-010  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 12:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.39	s.u.			Field	10/25/2013 1230
Conductivity	1909	µmhos/cm			Field	10/25/2013 1230
Dissolved Oxygen	3.96	mg/L			Field	10/25/2013 1230
Dissolved Oxygen (pct)	36.5	%			Field	10/25/2013 1230
Turbidity	4.91	NTU			Field	10/25/2013 1230
Temperature	11.8	°C			Field	10/25/2013 1230
Oxygen Reduction Potential (ORP)	-157	mV			Field	10/25/2013 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	608	mg/L		5	SM 2320B	10/28/2013 2143 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	651	mg/L		5	SM 2320B	10/28/2013 2143 KV
Alkalinity, Carbonate as CO <sub>3</sub>	45	mg/L		5	SM 2320B	10/28/2013 2143 KV
Chloride	6	mg/L		1	EPA 300.0	10/29/2013 340 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	10/28/2013 2143 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1130 RH
Sulfate	312	mg/L		1	EPA 300.0	10/29/2013 340 AMB
Calcium	4	mg/L		1	EPA 200.7	10/28/2013 2132 DG
Magnesium	2	mg/L		1	EPA 200.7	10/28/2013 2132 DG
Potassium	6	mg/L		1	EPA 200.7	10/28/2013 2132 DG
Sodium	422	mg/L		1	EPA 200.7	10/28/2013 2132 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1227 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	10/28/2013 2143 KV
Electrical Conductivity	1890	µmhos/cm		5	SM 2510B	10/28/2013 2143 KV
Total Dissolved Solids (180)	1230	mg/L		10	SM 2540	10/28/2013 1046 EC
<b>Data Quality</b>						
Cation Sum	18.87	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	18.83	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	0.10	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	1120	mg/L		10	SM 1030E	11/07/2013 1441 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-010  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 12:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2132	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1951	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1951	MS
Boron	0.4	mg/L		0.1	EPA 200.7	10/28/2013 2132	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1951	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2132	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1951	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2132	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1951	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1054	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1951	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2132	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1951	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1951	MS
Uranium	0.0082	mg/L		0.0003	EPA 200.8	10/28/2013 1951	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1951	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2132	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1216	MS
<b>Metals - Total</b>							
Iron	0.30	mg/L		0.05	EPA 200.7	10/29/2013 2047	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2047	DG

These results apply only to the samples tested.

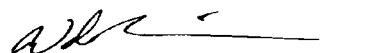
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-010  
**ClientSample ID:** 5367-34-06OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 12:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	29.1	pCi/L		2	SM 7110B	12/01/2013 2023	SH
Gross Alpha Precision (±)	4.4	pCi/L			SM 7110B	12/01/2013 2023	SH
Gross Beta	8.9	pCi/L		3	SM 7110B	12/01/2013 2023	SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	12/01/2013 2023	SH
Radium 226	5.1	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 1212	SH
Radium 226 Precision (±)	0.6	pCi/L			SM 7500 Ra-B	11/13/2013 1212	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/16/2013 1130	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/16/2013 1130	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/14/2013 919	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/14/2013 919	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/18/2013 948	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/18/2013 948	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-011  
**ClientSample ID:** 5367-34-06SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 12:50:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.60	s.u.			Field	10/25/2013 1250
Conductivity	1907	µmhos/cm			Field	10/25/2013 1250
Dissolved Oxygen	5.05	mg/L			Field	10/25/2013 1250
Dissolved Oxygen (pct)	46.3	%			Field	10/25/2013 1250
Turbidity	8.71	NTU			Field	10/25/2013 1250
Temperature	11.3	°C			Field	10/25/2013 1250
Oxygen Reduction Potential (ORP)	-116	mV			Field	10/25/2013 1250
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	587	mg/L		5	SM 2320B	10/28/2013 2155 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	610	mg/L		5	SM 2320B	10/28/2013 2155 KV
Alkalinity, Carbonate as CO <sub>3</sub>	52	mg/L		5	SM 2320B	10/28/2013 2155 KV
Chloride	5	mg/L		1	EPA 300.0	10/29/2013 353 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	10/28/2013 2155 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1132 RH
Sulfate	315	mg/L		1	EPA 300.0	10/29/2013 353 AMB
Calcium	3	mg/L		1	EPA 200.7	10/28/2013 2134 DG
Magnesium	1	mg/L		1	EPA 200.7	10/28/2013 2134 DG
Potassium	16	mg/L		1	EPA 200.7	10/28/2013 2134 DG
Sodium	424	mg/L		1	EPA 200.7	10/28/2013 2134 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	11/07/2013 1228 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	10/28/2013 2155 KV
Electrical Conductivity	1890	µmhos/cm		5	SM 2510B	10/28/2013 2155 KV
Total Dissolved Solids (180)	1240	mg/L		10	SM 2540	10/28/2013 1047 EC
<b>Data Quality</b>						
Cation Sum	19.11	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	18.44	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	1.77	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	1120	mg/L		10	SM 1030E	11/07/2013 1441 JJ

## These results apply only to the samples tested.

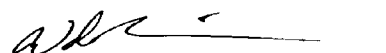
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-011  
**ClientSample ID:** 5367-34-06SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 12:50:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2134	DG
Arsenic	0.010	mg/L		0.005	EPA 200.8	10/28/2013 2008	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 2008	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/28/2013 2134	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 2008	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2134	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 2008	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2134	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 2008	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1056	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 2008	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2134	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 2008	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 2008	MS
Uranium	0.0017	mg/L		0.0003	EPA 200.8	10/28/2013 2008	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 2008	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2134	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1220	MS
<b>Metals - Total</b>							
Iron	0.23	mg/L		0.05	EPA 200.7	10/29/2013 2049	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2049	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-011  
**ClientSample ID:** 5367-34-06SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 12:50:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	7.7	pCi/L		2	SM 7110B	12/01/2013 2023 SH
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	12/01/2013 2023 SH
Gross Beta	15.1	pCi/L		3	SM 7110B	12/01/2013 2023 SH
Gross Beta Precision (±)	4.4	pCi/L			SM 7110B	12/01/2013 2023 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 1212 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 1212 SH
Radium 228	1.8	pCi/L		1	Ga-Tech	11/16/2013 1732 MK
Radium 228 Precision (±)	1.1	pCi/L			Ga-Tech	11/16/2013 1732 MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/14/2013 919 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/14/2013 919 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701 SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/18/2013 948 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/18/2013 948 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-003  
**ClientSample ID:** 5367-34-06SA  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 1:40:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.88	s.u.			Field	10/22/2013 1340
Conductivity	2160	µmhos/cm			Field	10/22/2013 1340
Dissolved Oxygen	1.16	mg/L			Field	10/22/2013 1340
Dissolved Oxygen (pct)	11.2	%			Field	10/22/2013 1340
Turbidity	2.05	NTU			Field	10/22/2013 1340
Temperature	13.7	°C			Field	10/22/2013 1340
Oxygen Reduction Potential (ORP)	-177	mV			Field	10/22/2013 1340
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	620	mg/L		5	SM 2320B	10/25/2013 1412 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	716	mg/L		5	SM 2320B	10/25/2013 1412 KV
Alkalinity, Carbonate as CO <sub>3</sub>	20	mg/L		5	SM 2320B	10/25/2013 1412 KV
Chloride	9	mg/L		1	EPA 300.0	10/25/2013 130 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	10/25/2013 1412 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/24/2013 1130 RH
Sulfate	408	mg/L		1	EPA 300.0	10/25/2013 130 AMB
Calcium	12	mg/L		1	EPA 200.7	10/24/2013 1651 DG
Magnesium	7	mg/L		1	EPA 200.7	10/24/2013 1651 DG
Potassium	13	mg/L		1	EPA 200.7	10/24/2013 1651 DG
Sodium	456	mg/L		1	EPA 200.7	10/24/2013 1651 DG
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	10/31/2013 950 RH
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	10/25/2013 1412 KV
Electrical Conductivity	2000	µmhos/cm		5	SM 2510B	10/25/2013 1412 KV
Total Dissolved Solids (180)	1330	mg/L		10	SM 2540	10/24/2013 848 EC
<b>Data Quality</b>						
Cation Sum	21.42	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Anion Sum	21.15	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Cation-Anion Balance (± 5%)	0.62	%		0.01	SM 1030E	10/31/2013 1531 LJK
Solids, Total Dissolved (Calc)	1280	mg/L		10	SM 1030E	10/31/2013 1531 LJK

These results apply only to the samples tested.

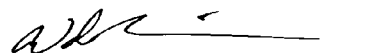
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-003  
**ClientSample ID:** 5367-34-06SA  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 1:40:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/24/2013 1651	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/24/2013 1329	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/24/2013 1329	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/24/2013 1651	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/24/2013 1329	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/24/2013 1651	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/24/2013 1329	MS
Iron	0.06	mg/L		0.05	EPA 200.7	10/24/2013 1651	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/24/2013 1329	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/25/2013 1146	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/24/2013 1329	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/24/2013 1651	DG
Selenium	0.007	mg/L		0.005	EPA 200.8	10/24/2013 1329	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/24/2013 1329	MS
Uranium	0.0008	mg/L		0.0003	EPA 200.8	10/24/2013 1329	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/24/2013 1329	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/24/2013 1651	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/29/2013 2237	MS
<b>Metals - Total</b>							
Iron	0.17	mg/L		0.05	EPA 200.7	10/25/2013 1757	DG
Manganese	0.06	mg/L		0.02	EPA 200.7	10/25/2013 1757	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-003  
**ClientSample ID:** 5367-34-06SA  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 1:40:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	10/31/2013 1921	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	10/31/2013 1921	SH
Gross Beta	ND	pCi/L		7	SM 7110B	10/31/2013 1921	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	10/31/2013 1921	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/02/2013 1522	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/02/2013 1522	WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/04/2013 330	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/04/2013 330	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-001  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 10:15:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.54	s.u.			Field	10/26/2013 1015
Conductivity	3070	µmhos/cm			Field	10/26/2013 1015
Dissolved Oxygen	2.88	mg/L			Field	10/26/2013 1015
Dissolved Oxygen (pct)	26.5	%			Field	10/26/2013 1015
Turbidity	0.16	NTU			Field	10/26/2013 1015
Temperature	12.1	°C			Field	10/26/2013 1015
Oxygen Reduction Potential (ORP)	-51	mV			Field	10/26/2013 1015
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	498	mg/L		5	SM 2320B	10/28/2013 1943 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	531	mg/L		5	SM 2320B	10/28/2013 1943 KV
Alkalinity, Carbonate as CO <sub>3</sub>	38	mg/L		5	SM 2320B	10/28/2013 1943 KV
Chloride	9	mg/L		1	EPA 300.0	10/29/2013 019 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	10/28/2013 1943 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1148 RH
Sulfate	803	mg/L		1	EPA 300.0	10/29/2013 019 AMB
Calcium	5	mg/L		1	EPA 200.7	10/28/2013 2044 DG
Magnesium	2	mg/L		1	EPA 200.7	10/28/2013 2044 DG
Potassium	11	mg/L		1	EPA 200.7	10/28/2013 2044 DG
Sodium	632	mg/L		1	EPA 200.7	10/28/2013 2044 DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	11/07/2013 1213 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	10/28/2013 1943 KV
Electrical Conductivity	2870	µmhos/cm		5	SM 2510B	10/28/2013 1943 KV
Total Dissolved Solids (180)	1910	mg/L		10	SM 2540	10/28/2013 1036 EC
<b>Data Quality</b>						
Cation Sum	28.19	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	26.97	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	2.21	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	1760	mg/L		10	SM 1030E	11/07/2013 1441 JJ

## These results apply only to the samples tested.

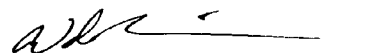
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-001  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 10:15:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2044	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1835	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1835	MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2044	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1835	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2044	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1835	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2044	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1835	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1022	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1835	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2044	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1835	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1835	MS
Uranium	0.0185	mg/L		0.0003	EPA 200.8	10/28/2013 1835	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1835	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2044	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1119	MS
<b>Metals - Total</b>							
Iron	0.22	mg/L		0.05	EPA 200.7	10/29/2013 2013	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2013	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-001  
**ClientSample ID:** 5368-43-12OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 10:15:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	40.8	pCi/L		2	SM 7110B	11/24/2013 1116	SH
Gross Alpha Precision (±)	5.8	pCi/L			SM 7110B	11/24/2013 1116	SH
Gross Beta	19.1	pCi/L		3	SM 7110B	11/24/2013 1116	SH
Gross Beta Precision (±)	5.3	pCi/L			SM 7110B	11/24/2013 1116	SH
Radium 226	0.8	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/15/2013 1122	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/15/2013 1122	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/11/2013 1216	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/11/2013 1216	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-014  
**ClientSample ID:** 5368-43-12SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 10:00:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.61	s.u.			Field	10/26/2013 1000
Conductivity	1806	µmhos/cm			Field	10/26/2013 1000
Dissolved Oxygen	2.67	mg/L			Field	10/26/2013 1000
Dissolved Oxygen (pct)	24.6	%			Field	10/26/2013 1000
Turbidity	2.03	NTU			Field	10/26/2013 1000
Temperature	11.6	°C			Field	10/26/2013 1000
Oxygen Reduction Potential (ORP)	-102	mV			Field	10/26/2013 1000
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	541	mg/L		5	SM 2320B	10/28/2013 2308 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	561	mg/L		5	SM 2320B	10/28/2013 2308 KV
Alkalinity, Carbonate as CO <sub>3</sub>	49	mg/L		5	SM 2320B	10/28/2013 2308 KV
Chloride	4	mg/L		1	EPA 300.0	10/29/2013 513 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	10/28/2013 2308 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1135 RH
Sulfate	321	mg/L		1	EPA 300.0	10/29/2013 513 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 2141 DG
Magnesium	1	mg/L		1	EPA 200.7	10/28/2013 2141 DG
Potassium	13	mg/L		1	EPA 200.7	10/28/2013 2141 DG
Sodium	410	mg/L		1	EPA 200.7	10/28/2013 2141 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1231 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	10/28/2013 2308 KV
Electrical Conductivity	1820	µmhos/cm		5	SM 2510B	10/28/2013 2308 KV
Total Dissolved Solids (180)	1180	mg/L		10	SM 2540	10/28/2013 1050 EC
<b>Data Quality</b>						
Cation Sum	18.37	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	17.67	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	1.94	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	1080	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-014  
**ClientSample ID:** 5368-43-12SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 10:00:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2141 DG
Arsenic	0.007	mg/L		0.005	EPA 200.8	10/28/2013 2051 MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 2051 MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2141 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 2051 MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2141 DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 2051 MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2141 DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 2051 MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1101 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 2051 MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2141 DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 2051 MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 2051 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/28/2013 2051 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 2051 MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2141 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1252 MS
<b>Metals - Total</b>						
Iron	0.09	mg/L		0.05	EPA 200.7	10/31/2013 1554 DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/31/2013 1554 DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-014  
**ClientSample ID:** 5368-43-12SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 10:00:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.2	pCi/L		2	SM 7110B	12/01/2013 2023	SH
Gross Alpha Precision (±)	4.8	pCi/L			SM 7110B	12/01/2013 2023	SH
Gross Beta	8.1	pCi/L		3	SM 7110B	12/01/2013 2023	SH
Gross Beta Precision (±)	4.4	pCi/L			SM 7110B	12/01/2013 2023	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 1212	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/13/2013 1212	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/17/2013 1138	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/17/2013 1138	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/14/2013 919	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/14/2013 919	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	0.2	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/19/2013 748	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/19/2013 748	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-002  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 12:45:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.68	s.u.			Field	10/26/2013 1245
Conductivity	1603	µmhos/cm			Field	10/26/2013 1245
Dissolved Oxygen	2.31	mg/L			Field	10/26/2013 1245
Dissolved Oxygen (pct)	22.4	%			Field	10/26/2013 1245
Turbidity	0.60	NTU			Field	10/26/2013 1245
Temperature	13.9	°C			Field	10/26/2013 1245
Oxygen Reduction Potential (ORP)	-39	mV			Field	10/26/2013 1245
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	494	mg/L		5	SM 2320B	10/28/2013 2006 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	495	mg/L		5	SM 2320B	10/28/2013 2006 KV
Alkalinity, Carbonate as CO <sub>3</sub>	53	mg/L		5	SM 2320B	10/28/2013 2006 KV
Chloride	5	mg/L		1	EPA 300.0	10/29/2013 033 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	10/28/2013 2006 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1149 RH
Sulfate	250	mg/L		1	EPA 300.0	10/29/2013 033 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 2048 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 2048 DG
Potassium	6	mg/L		1	EPA 200.7	10/28/2013 2048 DG
Sodium	350	mg/L		1	EPA 200.7	10/28/2013 2048 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1214 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	10/28/2013 2006 KV
Electrical Conductivity	1590	µmhos/cm		5	SM 2510B	10/28/2013 2006 KV
Total Dissolved Solids (180)	980	mg/L		10	SM 2540	10/28/2013 1037 EC
<b>Data Quality</b>						
Cation Sum	15.47	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	15.30	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	0.54	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	910	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-002  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 12:45:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2048	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1907	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1907	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/28/2013 2048	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1907	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2048	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1907	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2048	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1907	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1024	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1907	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2048	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1907	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1907	MS
Uranium	0.0145	mg/L		0.0003	EPA 200.8	10/28/2013 1907	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1907	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2048	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1135	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	10/29/2013 2016	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2016	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-002  
**ClientSample ID:** 5368-33-14OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 12:45:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	32.0	pCi/L		2	SM 7110B	11/24/2013 1116	SH
Gross Alpha Precision (±)	3.5	pCi/L			SM 7110B	11/24/2013 1116	SH
Gross Beta	12.0	pCi/L		3	SM 7110B	11/24/2013 1116	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	11/24/2013 1116	SH
Radium 226	0.7	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/15/2013 1423	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/15/2013 1423	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/11/2013 1216	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/11/2013 1216	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

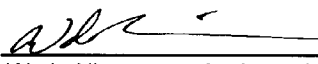
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-003  
**ClientSample ID:** 5368-33-14SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 2:00:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.79	s.u.			Field	10/26/2013 1400
Conductivity	1465	µmhos/cm			Field	10/26/2013 1400
Dissolved Oxygen	2.65	mg/L			Field	10/26/2013 1400
Dissolved Oxygen (pct)	25.6	%			Field	10/26/2013 1400
Turbidity	1.89	NTU			Field	10/26/2013 1400
Temperature	13.7	°C			Field	10/26/2013 1400
Oxygen Reduction Potential (ORP)	-90	mV			Field	10/26/2013 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	546	mg/L		5	SM 2320B	10/28/2013 2019 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	525	mg/L		5	SM 2320B	10/28/2013 2019 KV
Alkalinity, Carbonate as CO <sub>3</sub>	70	mg/L		5	SM 2320B	10/28/2013 2019 KV
Chloride	2	mg/L		1	EPA 300.0	10/29/2013 046 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	10/28/2013 2019 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1150 RH
Sulfate	164	mg/L		1	EPA 300.0	10/29/2013 046 AMB
Calcium	1	mg/L		1	EPA 200.7	10/28/2013 2102 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 2102 DG
Potassium	15	mg/L		1	EPA 200.7	10/28/2013 2102 DG
Sodium	315	mg/L		1	EPA 200.7	10/28/2013 2102 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	11/07/2013 1215 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	10/28/2013 2019 KV
Electrical Conductivity	1410	µmhos/cm		5	SM 2510B	10/28/2013 2019 KV
Total Dissolved Solids (180)	890	mg/L		10	SM 2540	10/28/2013 1038 EC
<b>Data Quality</b>						
Cation Sum	14.17	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	14.45	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	0.98	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	820	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.

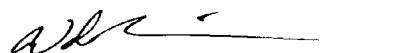
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-003  
**ClientSample ID:** 5368-33-14SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 2:00:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2102	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1913	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1913	MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2102	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1913	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2102	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1913	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2102	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1913	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1026	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1913	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2102	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1913	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1913	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/28/2013 1913	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1913	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2102	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1139	MS
<b>Metals - Total</b>							
Iron	0.06	mg/L		0.05	EPA 200.7	10/29/2013 2018	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2018	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-003  
**ClientSample ID:** 5368-33-14SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/26/2013 2:00:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	8.2	pCi/L		2	SM 7110B	11/24/2013 1116	SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	11/24/2013 1116	SH
Gross Beta	14.8	pCi/L		3	SM 7110B	11/24/2013 1116	SH
Gross Beta Precision (±)	2.9	pCi/L			SM 7110B	11/24/2013 1116	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/15/2013 1724	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/15/2013 1724	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/14/2013 919	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/14/2013 919	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

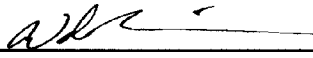
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-004  
**ClientSample ID:** 5368-33-14SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 3:30:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.24	s.u.			Field	10/24/2013 1530
Conductivity	867	µmhos/cm			Field	10/24/2013 1530
Dissolved Oxygen	2.77	mg/L			Field	10/24/2013 1530
Dissolved Oxygen (pct)	27.1	%			Field	10/24/2013 1530
Turbidity	3.73	NTU			Field	10/24/2013 1530
Temperature	12.6	°C			Field	10/24/2013 1530
Oxygen Reduction Potential (ORP)	-45	mV			Field	10/24/2013 1530
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	400	mg/L		5	SM 2320B	10/28/2013 2107 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	479	mg/L		5	SM 2320B	10/28/2013 2107 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	10/28/2013 2107 KV
Chloride	1	mg/L		1	EPA 300.0	10/28/2013 1339 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	10/28/2013 2107 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1144 RH
Sulfate	52	mg/L		1	EPA 300.0	10/28/2013 1339 AMB
Calcium	26	mg/L		1	EPA 200.7	10/28/2013 1837 DG
Magnesium	21	mg/L		1	EPA 200.7	10/28/2013 1837 DG
Potassium	12	mg/L		1	EPA 200.7	10/28/2013 1837 DG
Sodium	127	mg/L		1	EPA 200.7	10/28/2013 1837 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	10/31/2013 1033 RH
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	10/28/2013 2107 KV
Electrical Conductivity	899	µmhos/cm		5	SM 2510B	10/28/2013 2107 KV
Total Dissolved Solids (180)	510	mg/L		10	SM 2540	10/28/2013 1000 EC
<b>Data Quality</b>						
Cation Sum	8.88	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Anion Sum	9.11	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Cation-Anion Balance (± 5%)	1.25	%		0.01	SM 1030E	11/01/2013 1559 BC
Solids, Total Dissolved (Calc)	480	mg/L		10	SM 1030E	11/01/2013 1559 BC

These results apply only to the samples tested.

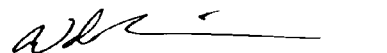
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-004  
**ClientSample ID:** 5368-33-14SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 3:30:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1837	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/26/2013 056	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/26/2013 056	MS
Boron	ND	mg/L		0.1	EPA 200.7	10/28/2013 1837	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/26/2013 056	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1837	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/26/2013 056	MS
Iron	0.17	mg/L		0.05	EPA 200.7	10/28/2013 1837	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/26/2013 056	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1245	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/26/2013 056	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1837	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/26/2013 056	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/26/2013 056	MS
Uranium	0.0125	mg/L		0.0003	EPA 200.8	10/26/2013 056	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/26/2013 056	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1837	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 242	MS
<b>Metals - Total</b>							
Iron	0.59	mg/L		0.05	EPA 200.7	10/29/2013 1808	DG
Manganese	0.11	mg/L		0.02	EPA 200.7	10/29/2013 1808	DG

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-004  
**ClientSample ID:** 5368-33-14SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 3:30:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.8	pCi/L		2	SM 7110B	11/03/2013 1854	SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	11/03/2013 1854	SH
Gross Beta	7.6	pCi/L		4	SM 7110B	11/03/2013 1854	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	11/03/2013 1854	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/08/2013 1231	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/08/2013 1231	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/11/2013 1216	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/11/2013 1216	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2013 815	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2013 815	MB

## These results apply only to the samples tested.

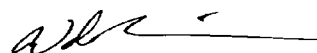
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-005  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 12:00:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.44	s.u.			Field	10/27/2013 1200
Conductivity	1564	µmhos/cm			Field	10/27/2013 1200
Dissolved Oxygen	2.04	mg/L			Field	10/27/2013 1200
Dissolved Oxygen (pct)	19.6	%			Field	10/27/2013 1200
Turbidity	14.63	NTU			Field	10/27/2013 1200
Temperature	13.5	°C			Field	10/27/2013 1200
Oxygen Reduction Potential (ORP)	-89	mV			Field	10/27/2013 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	501	mg/L		5	SM 2320B	10/28/2013 2043 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	538	mg/L		5	SM 2320B	10/28/2013 2043 KV
Alkalinity, Carbonate as CO <sub>3</sub>	36	mg/L		5	SM 2320B	10/28/2013 2043 KV
Chloride	3	mg/L		1	EPA 300.0	10/29/2013 233 AMB
Fluoride	1.8	mg/L		0.1	SM 4500FC	10/28/2013 2043 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1118 RH
Sulfate	226	mg/L		1	EPA 300.0	10/29/2013 233 AMB
Calcium	3	mg/L		1	EPA 200.7	10/28/2013 2107 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 2107 DG
Potassium	3	mg/L		1	EPA 200.7	10/28/2013 2107 DG
Sodium	349	mg/L		1	EPA 200.7	10/28/2013 2107 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1217 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	10/28/2013 2043 KV
Electrical Conductivity	1540	µmhos/cm		5	SM 2510B	10/28/2013 2043 KV
Total Dissolved Solids (180)	980	mg/L		10	SM 2540	10/28/2013 1040 EC
<b>Data Quality</b>						
Cation Sum	15.40	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	14.89	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	1.67	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	880	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-005  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 12:00:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2107	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1924	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1924	MS
Boron	0.4	mg/L		0.1	EPA 200.7	10/28/2013 2107	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1924	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2107	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1924	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2107	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1924	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1030	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1924	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2107	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1924	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1924	MS
Uranium	0.0010	mg/L		0.0003	EPA 200.8	10/28/2013 1924	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1924	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2107	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1155	MS
<b>Metals - Total</b>							
Iron	0.65	mg/L		0.05	EPA 200.7	10/29/2013 2036	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2036	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-005  
**ClientSample ID:** 5368-41-23OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 12:00:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	11/24/2013 1116	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	11/24/2013 1116	SH
Gross Beta	ND	pCi/L		3	SM 7110B	11/24/2013 1116	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/24/2013 1116	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/15/2013 2326	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/15/2013 2326	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/13/2013 929	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/13/2013 929	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-004  
**ClientSample ID:** 5368-41-23SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 10:50:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.42	s.u.			Field	10/27/2013 1050
Conductivity	1580	µmhos/cm			Field	10/27/2013 1050
Dissolved Oxygen	2.46	mg/L			Field	10/27/2013 1050
Dissolved Oxygen (pct)	23.3	%			Field	10/27/2013 1050
Turbidity	3.93	NTU			Field	10/27/2013 1050
Temperature	12.8	°C			Field	10/27/2013 1050
Oxygen Reduction Potential (ORP)	-123	mV			Field	10/27/2013 1050
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	541	mg/L		5	SM 2320B	10/28/2013 2031 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	576	mg/L		5	SM 2320B	10/28/2013 2031 KV
Alkalinity, Carbonate as CO <sub>3</sub>	41	mg/L		5	SM 2320B	10/28/2013 2031 KV
Chloride	3	mg/L		1	EPA 300.0	10/29/2013 220 AMB
Fluoride	1.8	mg/L		0.1	SM 4500FC	10/28/2013 2031 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1151 RH
Sulfate	206	mg/L		1	EPA 300.0	10/29/2013 220 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 2104 DG
Magnesium	1	mg/L		1	EPA 200.7	10/28/2013 2104 DG
Potassium	5	mg/L		1	EPA 200.7	10/28/2013 2104 DG
Sodium	349	mg/L		1	EPA 200.7	10/28/2013 2104 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1216 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	10/28/2013 2031 KV
Electrical Conductivity	1540	µmhos/cm		5	SM 2510B	10/28/2013 2031 KV
Total Dissolved Solids (180)	990	mg/L		10	SM 2540	10/28/2013 1039 EC
<b>Data Quality</b>						
Cation Sum	15.50	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	15.26	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	0.77	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	890	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.

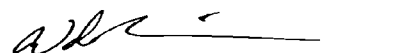
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-004  
**ClientSample ID:** 5368-41-23SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 10:50:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2104 DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	10/28/2013 1918 MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1918 MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2104 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1918 MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2104 DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1918 MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2104 DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1918 MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1028 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1918 MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2104 DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1918 MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1918 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/28/2013 1918 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1918 MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2104 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1143 MS
<b>Metals - Total</b>						
Iron	0.15	mg/L		0.05	EPA 200.7	10/29/2013 2022 DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2022 DG

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-004  
**ClientSample ID:** 5368-41-23SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 10:50:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

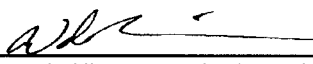
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.4	pCi/L		2	SM 7110B	11/24/2013 1116	SH
Gross Alpha Precision (±)	1.8	pCi/L			SM 7110B	11/24/2013 1116	SH
Gross Beta	ND	pCi/L		3	SM 7110B	11/24/2013 1116	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/24/2013 1116	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/15/2013 2025	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/15/2013 2025	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/13/2013 929	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/13/2013 929	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-006  
**ClientSample ID:** 5368-41-23SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 4:40:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.72	s.u.			Field	10/24/2013 1640
Conductivity	1243	µmhos/cm			Field	10/24/2013 1640
Dissolved Oxygen	2.37	mg/L			Field	10/24/2013 1640
Dissolved Oxygen (pct)	22.4	%			Field	10/24/2013 1640
Turbidity	4.51	NTU			Field	10/24/2013 1640
Temperature	12.9	°C			Field	10/24/2013 1640
Oxygen Reduction Potential (ORP)	+33	mV			Field	10/24/2013 1640
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	538	mg/L		5	SM 2320B	10/30/2013 1530 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	656	mg/L		5	SM 2320B	10/30/2013 1530 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	10/30/2013 1530 KV
Chloride	3	mg/L		1	EPA 300.0	10/30/2013 2230 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	10/28/2013 2126 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1147 RH
Sulfate	158	mg/L		1	EPA 300.0	10/30/2013 2230 AMB
Calcium	120	mg/L		1	EPA 200.7	11/01/2013 1104 DG
Magnesium	60	mg/L		1	EPA 200.7	11/01/2013 1104 DG
Potassium	28	mg/L		1	EPA 200.7	11/01/2013 1104 DG
Sodium	55	mg/L		1	EPA 200.7	11/01/2013 1104 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	10/31/2013 1035 RH
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	10/28/2013 2126 KV
Electrical Conductivity	1340	µmhos/cm		5	SM 2510B	10/28/2013 2126 KV
Total Dissolved Solids (180)	800	mg/L		10	SM 2540	10/28/2013 1002 EC
<b>Data Quality</b>						
Cation Sum	14.02	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Anion Sum	14.12	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Cation-Anion Balance (± 5%)	0.35	%		0.01	SM 1030E	11/01/2013 1559 BC
Solids, Total Dissolved (Calc)	750	mg/L		10	SM 1030E	11/01/2013 1559 BC

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-006  
**ClientSample ID:** 5368-41-23SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 4:40:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1842	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/26/2013 107	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/26/2013 107	MS
Boron	ND	mg/L		0.1	EPA 200.7	10/28/2013 1842	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/26/2013 107	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1842	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/26/2013 107	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1842	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/26/2013 107	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1255	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/26/2013 107	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1842	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/26/2013 107	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/26/2013 107	MS
Uranium	0.0626	mg/L		0.0003	EPA 200.8	10/26/2013 107	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/26/2013 107	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1842	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 320	MS
<b>Metals - Total</b>							
Iron	0.23	mg/L		0.05	EPA 200.7	10/29/2013 1812	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	10/29/2013 1812	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-006  
**ClientSample ID:** 5368-41-23SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 4:40:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	35.4	pCi/L		3	SM 7110B	11/03/2013 1854	SH
Gross Alpha Precision (±)	3.8	pCi/L			SM 7110B	11/03/2013 1854	SH
Gross Beta	26.3	pCi/L		5	SM 7110B	11/03/2013 1854	SH
Gross Beta Precision (±)	3.2	pCi/L			SM 7110B	11/03/2013 1854	SH
Radium 226	0.8	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/08/2013 1834	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/08/2013 1834	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/11/2013 1216	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/11/2013 1216	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2013 815	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2013 815	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-007  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 3:15:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.53	s.u.			Field	10/27/2013 1515
Conductivity	1917	µmhos/cm			Field	10/27/2013 1515
Dissolved Oxygen	2.44	mg/L			Field	10/27/2013 1515
Dissolved Oxygen (pct)	23.5	%			Field	10/27/2013 1515
Turbidity	0.68	NTU			Field	10/27/2013 1515
Temperature	13.5	°C			Field	10/27/2013 1515
Oxygen Reduction Potential (ORP)	-53	mV			Field	10/27/2013 1515
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	489	mg/L		5	SM 2320B	10/28/2013 2107 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	516	mg/L		5	SM 2320B	10/28/2013 2107 KV
Alkalinity, Carbonate as CO <sub>3</sub>	40	mg/L		5	SM 2320B	10/28/2013 2107 KV
Chloride	8	mg/L		1	EPA 300.0	10/29/2013 300 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	10/28/2013 2107 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1127 RH
Sulfate	387	mg/L		1	EPA 300.0	10/29/2013 300 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 2111 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 2111 DG
Potassium	5	mg/L		1	EPA 200.7	10/28/2013 2111 DG
Sodium	428	mg/L		1	EPA 200.7	10/28/2013 2111 DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	11/07/2013 1219 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	10/28/2013 2107 KV
Electrical Conductivity	1920	µmhos/cm		5	SM 2510B	10/28/2013 2107 KV
Total Dissolved Solids (180)	1250	mg/L		10	SM 2540	10/28/2013 1042 EC
<b>Data Quality</b>						
Cation Sum	18.88	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	18.14	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	2.00	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	1120	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-007  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 3:15:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2111 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1935 MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1935 MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2111 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1935 MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2111 DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1935 MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2111 DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1935 MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1034 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1935 MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2111 DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1935 MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1935 MS
Uranium	0.0097	mg/L		0.0003	EPA 200.8	10/28/2013 1935 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1935 MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2111 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1203 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	10/29/2013 2040 DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2040 DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-007  
**ClientSample ID:** 5368-24-12OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 3:15:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	21.6	pCi/L		2	SM 7110B	11/24/2013 1116	SH
Gross Alpha Precision (±)	4.1	pCi/L			SM 7110B	11/24/2013 1116	SH
Gross Beta	ND	pCi/L		3	SM 7110B	11/24/2013 1116	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/24/2013 1116	SH
Radium 226	3.7	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.3	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/16/2013 528	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/16/2013 528	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/13/2013 929	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/13/2013 929	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

## These results apply only to the samples tested.

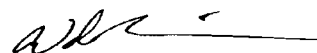
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-006  
**ClientSample ID:** 5368-24-12SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 2:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.48	s.u.			Field	10/27/2013 1430
Conductivity	1457	µmhos/cm			Field	10/27/2013 1430
Dissolved Oxygen	2.83	mg/L			Field	10/27/2013 1430
Dissolved Oxygen (pct)	27.3	%			Field	10/27/2013 1430
Turbidity	19.3	NTU			Field	10/27/2013 1430
Temperature	12.9	°C			Field	10/27/2013 1430
Oxygen Reduction Potential (ORP)	-96	mV			Field	10/27/2013 1430
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	528	mg/L		5	SM 2320B	10/28/2013 2054 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	558	mg/L		5	SM 2320B	10/28/2013 2054 KV
Alkalinity, Carbonate as CO <sub>3</sub>	42	mg/L		5	SM 2320B	10/28/2013 2054 KV
Chloride	3	mg/L		1	EPA 300.0	10/29/2013 246 AMB
Fluoride	2.3	mg/L		0.1	SM 4500FC	10/28/2013 2054 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1119 RH
Sulfate	174	mg/L		1	EPA 300.0	10/29/2013 246 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 2109 DG
Magnesium	1	mg/L		1	EPA 200.7	10/28/2013 2109 DG
Potassium	3	mg/L		1	EPA 200.7	10/28/2013 2109 DG
Sodium	326	mg/L		1	EPA 200.7	10/28/2013 2109 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	11/07/2013 1218 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	10/28/2013 2054 KV
Electrical Conductivity	1430	µmhos/cm		5	SM 2510B	10/28/2013 2054 KV
Total Dissolved Solids (180)	910	mg/L		10	SM 2540	10/28/2013 1041 EC
<b>Data Quality</b>						
Cation Sum	14.46	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	14.38	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	0.29	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	830	mg/L		10	SM 1030E	11/07/2013 1441 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-006  
**ClientSample ID:** 5368-24-12SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 2:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2109	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1929	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1929	MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2109	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1929	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2109	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1929	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2109	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1929	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1032	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1929	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2109	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1929	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1929	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/28/2013 1929	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1929	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2109	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1159	MS
<b>Metals - Total</b>							
Iron	0.64	mg/L		0.05	EPA 200.7	10/29/2013 2038	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2038	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-006  
**ClientSample ID:** 5368-24-12SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/27/2013 2:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	11/24/2013 1116	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	11/24/2013 1116	SH
Gross Beta	ND	pCi/L		3	SM 7110B	11/24/2013 1116	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/24/2013 1116	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/16/2013 227	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/16/2013 227	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/13/2013 929	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/13/2013 929	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

## These results apply only to the samples tested.

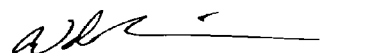
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-004  
**ClientSample ID:** 5368-24-12SA  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 3:10:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.73	s.u.			Field	10/22/2013 1510
Conductivity	1133	µmhos/cm			Field	10/22/2013 1510
Dissolved Oxygen	1.56	mg/L			Field	10/22/2013 1510
Dissolved Oxygen (pct)	14.8	%			Field	10/22/2013 1510
Turbidity	6.11	NTU			Field	10/22/2013 1510
Temperature	12.6	°C			Field	10/22/2013 1510
Oxygen Reduction Potential (ORP)	-103	mV			Field	10/22/2013 1510
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	562	mg/L		5	SM 2320B	10/25/2013 1425 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	585	mg/L		5	SM 2320B	10/25/2013 1425 KV
Alkalinity, Carbonate as CO <sub>3</sub>	50	mg/L		5	SM 2320B	10/25/2013 1425 KV
Chloride	3	mg/L		1	EPA 300.0	10/25/2013 144 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	10/25/2013 1425 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/24/2013 1131 RH
Sulfate	65	mg/L		1	EPA 300.0	10/25/2013 144 AMB
Calcium	2	mg/L		1	EPA 200.7	10/24/2013 1653 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/24/2013 1653 DG
Potassium	5	mg/L		1	EPA 200.7	10/24/2013 1653 DG
Sodium	270	mg/L		1	EPA 200.7	10/24/2013 1653 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	10/31/2013 951 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	10/25/2013 1425 KV
Electrical Conductivity	1080	µmhos/cm		5	SM 2510B	10/25/2013 1425 KV
Total Dissolved Solids (180)	680	mg/L		10	SM 2540	10/24/2013 849 EC
<b>Data Quality</b>						
Cation Sum	11.96	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Anion Sum	12.69	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Cation-Anion Balance (± 5%)	2.94	%		0.01	SM 1030E	10/31/2013 1531 LJK
Solids, Total Dissolved (Calc)	680	mg/L		10	SM 1030E	10/31/2013 1531 LJK

## These results apply only to the samples tested.

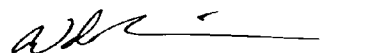
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-004  
**ClientSample ID:** 5368-24-12SA  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 3:10:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/24/2013 1653	DG
Arsenic	0.022	mg/L		0.005	EPA 200.8	10/24/2013 1334	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/24/2013 1334	MS
Boron	0.2	mg/L		0.1	EPA 200.7	10/24/2013 1653	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/24/2013 1334	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/24/2013 1653	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/24/2013 1334	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/24/2013 1653	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/24/2013 1334	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/25/2013 1152	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/24/2013 1334	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/24/2013 1653	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/24/2013 1334	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/24/2013 1334	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/24/2013 1334	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/24/2013 1334	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/24/2013 1653	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/29/2013 2253	MS
<b>Metals - Total</b>							
Iron	0.21	mg/L		0.05	EPA 200.7	10/25/2013 1759	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/25/2013 1759	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-004  
**ClientSample ID:** 5368-24-12SA  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 3:10:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.0	pCi/L		2	SM 7110B	10/31/2013 1921	SH
Gross Alpha Precision (±)	1.2	pCi/L			SM 7110B	10/31/2013 1921	SH
Gross Beta	4.8	pCi/L		4	SM 7110B	10/31/2013 1921	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	10/31/2013 1921	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/02/2013 1823	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/02/2013 1823	WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/04/2013 330	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/04/2013 330	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

## These results apply only to the samples tested.

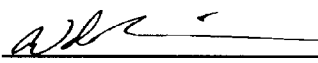
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-012  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 3:15:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.53	s.u.			Field	10/25/2013 1515
Conductivity	1946	µmhos/cm			Field	10/25/2013 1515
Dissolved Oxygen	2.80	mg/L			Field	10/25/2013 1515
Dissolved Oxygen (pct)	26.6	%			Field	10/25/2013 1515
Turbidity	9.39	NTU			Field	10/25/2013 1515
Temperature	13.0	°C			Field	10/25/2013 1515
Oxygen Reduction Potential (ORP)	-116	mV			Field	10/25/2013 1515
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	591	mg/L		5	SM 2320B	10/28/2013 2220 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	616	mg/L		5	SM 2320B	10/28/2013 2220 KV
Alkalinity, Carbonate as CO <sub>3</sub>	52	mg/L		5	SM 2320B	10/28/2013 2220 KV
Chloride	5	mg/L		1	EPA 300.0	10/29/2013 406 AMB
Fluoride	1.1	mg/L		0.1	SM 4500FC	10/28/2013 2220 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1133 RH
Sulfate	338	mg/L		1	EPA 300.0	10/29/2013 406 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 2136 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 2136 DG
Potassium	8	mg/L		1	EPA 200.7	10/28/2013 2136 DG
Sodium	430	mg/L		1	EPA 200.7	10/28/2013 2136 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1229 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	10/28/2013 2220 KV
Electrical Conductivity	1910	µmhos/cm		5	SM 2510B	10/28/2013 2220 KV
Total Dissolved Solids (180)	1240	mg/L		10	SM 2540	10/28/2013 1048 EC
<b>Data Quality</b>						
Cation Sum	19.02	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	19.04	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	0.05	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	1140	mg/L		10	SM 1030E	11/07/2013 1441 JJ

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-012  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 3:15:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2136	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 2040	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 2040	MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2136	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 2040	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2136	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 2040	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2136	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 2040	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1057	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 2040	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2136	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 2040	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 2040	MS
Uranium	0.0009	mg/L		0.0003	EPA 200.8	10/28/2013 2040	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 2040	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2136	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1244	MS
<b>Metals - Total</b>							
Iron	0.48	mg/L		0.05	EPA 200.7	10/29/2013 2052	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2052	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-012  
**ClientSample ID:** 5368-43-24OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 3:15:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	6.0	pCi/L		2	SM 7110B	12/01/2013 2023	SH
Gross Alpha Precision (±)	2.8	pCi/L			SM 7110B	12/01/2013 2023	SH
Gross Beta	8.3	pCi/L		3	SM 7110B	12/01/2013 2023	SH
Gross Beta Precision (±)	4.1	pCi/L			SM 7110B	12/01/2013 2023	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 1212	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/13/2013 1212	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/16/2013 2033	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/16/2013 2033	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/14/2013 919	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/14/2013 919	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	0.3	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/18/2013 948	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/18/2013 948	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-013  
**ClientSample ID:** 5368-43-24SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 4:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.26	s.u.			Field	10/25/2013 1630
Conductivity	2020	µmhos/cm			Field	10/25/2013 1630
Dissolved Oxygen	1.84	mg/L			Field	10/25/2013 1630
Dissolved Oxygen (pct)	17.6	%			Field	10/25/2013 1630
Turbidity	1.72	NTU			Field	10/25/2013 1630
Temperature	12.8	°C			Field	10/25/2013 1630
Oxygen Reduction Potential (ORP)	-142	mV			Field	10/25/2013 1630
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	559	mg/L		5	SM 2320B	10/28/2013 2256 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	613	mg/L		5	SM 2320B	10/28/2013 2256 KV
Alkalinity, Carbonate as CO <sub>3</sub>	34	mg/L		5	SM 2320B	10/28/2013 2256 KV
Chloride	5	mg/L		1	EPA 300.0	10/29/2013 420 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	10/28/2013 2256 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1134 RH
Sulfate	325	mg/L		1	EPA 300.0	10/29/2013 420 AMB
Calcium	4	mg/L		1	EPA 200.7	10/28/2013 2138 DG
Magnesium	2	mg/L		1	EPA 200.7	10/28/2013 2138 DG
Potassium	5	mg/L		1	EPA 200.7	10/28/2013 2138 DG
Sodium	420	mg/L		1	EPA 200.7	10/28/2013 2138 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1230 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	10/28/2013 2256 KV
Electrical Conductivity	1860	µmhos/cm		5	SM 2510B	10/28/2013 2256 KV
Total Dissolved Solids (180)	1230	mg/L		10	SM 2540	10/28/2013 1049 EC
<b>Data Quality</b>						
Cation Sum	18.78	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	18.13	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	1.73	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	1100	mg/L		10	SM 1030E	11/07/2013 1441 JJ

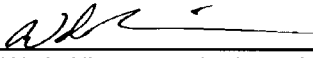
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-013  
**ClientSample ID:** 5368-43-24SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 4:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2138	DG
Arsenic	0.009	mg/L		0.005	EPA 200.8	10/28/2013 2045	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 2045	MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2138	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 2045	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2138	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 2045	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2138	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 2045	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1059	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 2045	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2138	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 2045	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 2045	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/28/2013 2045	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 2045	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2138	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1248	MS
<b>Metals - Total</b>							
Iron	0.11	mg/L		0.05	EPA 200.7	10/31/2013 1542	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/31/2013 1542	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-013  
**ClientSample ID:** 5368-43-24SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 4:30:00 PM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.3	pCi/L		2	SM 7110B	12/01/2013 2023	SH
Gross Alpha Precision (±)	2.5	pCi/L			SM 7110B	12/01/2013 2023	SH
Gross Beta	ND	pCi/L		3	SM 7110B	12/01/2013 2023	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	12/01/2013 2023	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 1212	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/13/2013 1212	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/16/2013 2334	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/16/2013 2334	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/14/2013 919	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/14/2013 919	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/18/2013 948	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/18/2013 948	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 10:40:00 AM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.31	s.u.			Field	10/24/2013 1040
Conductivity	898	µmhos/cm			Field	10/24/2013 1040
Dissolved Oxygen	3.28	mg/L			Field	10/24/2013 1040
Dissolved Oxygen (pct)	29.2	%			Field	10/24/2013 1040
Turbidity	5.45	NTU			Field	10/24/2013 1040
Temperature	9.5	°C			Field	10/24/2013 1040
Oxygen Reduction Potential (ORP)	+1	mV			Field	10/24/2013 1040
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	360	mg/L		5	SM 2320B	10/28/2013 2047 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	440	mg/L		5	SM 2320B	10/28/2013 2047 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	10/28/2013 2047 KV
Chloride	3	mg/L		1	EPA 300.0	10/28/2013 1312 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	10/28/2013 2047 KV
Nitrogen, Nitrate+Nitrite (as N)	0.4	mg/L		0.1	EPA 353.2	10/29/2013 1213 RH
Sulfate	81	mg/L		1	EPA 300.0	10/28/2013 1312 AMB
Calcium	48	mg/L		1	EPA 200.7	10/28/2013 1822 DG
Magnesium	24	mg/L		1	EPA 200.7	10/28/2013 1822 DG
Potassium	9	mg/L		1	EPA 200.7	10/28/2013 1822 DG
Sodium	100	mg/L		1	EPA 200.7	10/28/2013 1822 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	10/31/2013 1031 RH
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	10/28/2013 2047 KV
Electrical Conductivity	927	µmhos/cm		5	SM 2510B	10/28/2013 2047 KV
Total Dissolved Solids (180)	530	mg/L		10	SM 2540	10/28/2013 958 EC
<b>Data Quality</b>						
Cation Sum	8.96	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Anion Sum	9.03	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Cation-Anion Balance (± 5%)	0.40	%		0.01	SM 1030E	11/01/2013 1559 BC
Solids, Total Dissolved (Calc)	480	mg/L		10	SM 1030E	11/01/2013 1559 BC

These results apply only to the samples tested.

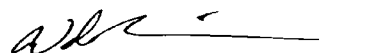
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 10:40:00 AM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1822	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/26/2013 045	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/26/2013 045	MS
Boron	ND	mg/L		0.1	EPA 200.7	10/28/2013 1822	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/26/2013 045	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1822	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/26/2013 045	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1822	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/26/2013 045	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1237	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/26/2013 045	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1822	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/26/2013 045	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/26/2013 045	MS
Uranium	0.0619	mg/L		0.0003	EPA 200.8	10/26/2013 045	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/26/2013 045	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1822	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 225	MS
<b>Metals - Total</b>							
Iron	0.32	mg/L		0.05	EPA 200.7	10/29/2013 1752	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 1752	DG

These results apply only to the samples tested.

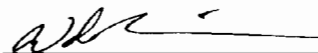
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-002  
**ClientSample ID:** 5368-43-24SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 10:40:00 AM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	38.1	pCi/L		2	SM 7110B	11/02/2013 2124	SH
Gross Alpha Precision (±)	3.4	pCi/L			SM 7110B	11/02/2013 2124	SH
Gross Beta	14.5	pCi/L		4	SM 7110B	11/02/2013 2124	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	11/02/2013 2124	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/08/2013 629	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/08/2013 629	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/07/2013 803	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/07/2013 803	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2013 815	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2013 815	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-009  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 10:40:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.70	s.u.			Field	10/25/2013 1040
Conductivity	1471	µmhos/cm			Field	10/25/2013 1040
Dissolved Oxygen	2.04	mg/L			Field	10/25/2013 1040
Dissolved Oxygen (pct)	19.4	%			Field	10/25/2013 1040
Turbidity	8.76	NTU			Field	10/25/2013 1040
Temperature	13.2	°C			Field	10/25/2013 1040
Oxygen Reduction Potential (ORP)	-103	mV			Field	10/25/2013 1040
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	466	mg/L		5	SM 2320B	10/28/2013 2130 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	472	mg/L		5	SM 2320B	10/28/2013 2130 KV
Alkalinity, Carbonate as CO <sub>3</sub>	47	mg/L		5	SM 2320B	10/28/2013 2130 KV
Chloride	5	mg/L		1	EPA 300.0	10/29/2013 326 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	10/28/2013 2130 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1129 RH
Sulfate	222	mg/L		1	EPA 300.0	10/29/2013 326 AMB
Calcium	1	mg/L		1	EPA 200.7	10/28/2013 2118 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 2118 DG
Potassium	4	mg/L		1	EPA 200.7	10/28/2013 2118 DG
Sodium	326	mg/L		1	EPA 200.7	10/28/2013 2118 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	11/07/2013 1226 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	10/28/2013 2130 KV
Electrical Conductivity	1450	µmhos/cm		5	SM 2510B	10/28/2013 2130 KV
Total Dissolved Solids (180)	920	mg/L		10	SM 2540	10/28/2013 1045 EC
<b>Data Quality</b>						
Cation Sum	14.39	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	14.11	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	0.98	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	840	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.

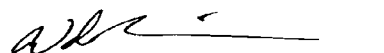
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-009  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 10:40:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2118	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1946	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1946	MS
Boron	0.2	mg/L		0.1	EPA 200.7	10/28/2013 2118	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1946	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2118	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1946	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2118	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1946	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1046	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1946	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2118	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/28/2013 1946	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1946	MS
Uranium	0.0111	mg/L		0.0003	EPA 200.8	10/28/2013 1946	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1946	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2118	DG
<b>Metals - Suspended</b>							
Uranium	0.0007	mg/L		0.0003	EPA 200.8	11/05/2013 1212	MS
<b>Metals - Total</b>							
Iron	0.38	mg/L		0.05	EPA 200.7	10/29/2013 2045	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2045	DG

## These results apply only to the samples tested.

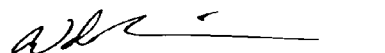
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-009  
**ClientSample ID:** 5368-32-23OZ  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 10:40:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	15.2	pCi/L		2	SM 7110B	11/25/2013 022	SH
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	11/25/2013 022	SH
Gross Beta	ND	pCi/L		3	SM 7110B	11/25/2013 022	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/25/2013 022	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 1212	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 1212	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/16/2013 1130	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/16/2013 1130	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/14/2013 919	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/14/2013 919	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/18/2013 948	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/18/2013 948	MB

## These results apply only to the samples tested.

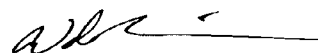
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-008  
**ClientSample ID:** 5368-32-23SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 10:15:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.73	s.u.			Field	10/25/2013 1015
Conductivity	1526	µmhos/cm			Field	10/25/2013 1015
Dissolved Oxygen	2.46	mg/L			Field	10/25/2013 1015
Dissolved Oxygen (pct)	23.6	%			Field	10/25/2013 1015
Turbidity	0.97	NTU			Field	10/25/2013 1015
Temperature	12.7	°C			Field	10/25/2013 1015
Oxygen Reduction Potential (ORP)	-152	mV			Field	10/25/2013 1015
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	533	mg/L		5	SM 2320B	10/28/2013 2119 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	531	mg/L		5	SM 2320B	10/28/2013 2119 KV
Alkalinity, Carbonate as CO <sub>3</sub>	59	mg/L		5	SM 2320B	10/28/2013 2119 KV
Chloride	3	mg/L		1	EPA 300.0	10/29/2013 313 AMB
Fluoride	1.9	mg/L		0.1	SM 4500FC	10/28/2013 2119 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1128 RH
Sulfate	183	mg/L		1	EPA 300.0	10/29/2013 313 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 2113 DG
Magnesium	1	mg/L		1	EPA 200.7	10/28/2013 2113 DG
Potassium	8	mg/L		1	EPA 200.7	10/28/2013 2113 DG
Sodium	340	mg/L		1	EPA 200.7	10/28/2013 2113 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	11/07/2013 1225 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	10/28/2013 2119 KV
Electrical Conductivity	1500	µmhos/cm		5	SM 2510B	10/28/2013 2119 KV
Total Dissolved Solids (180)	960	mg/L		10	SM 2540	10/28/2013 1043 EC
<b>Data Quality</b>						
Cation Sum	15.17	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Anion Sum	14.66	meq/L		0.01	SM 1030E	11/07/2013 1441 JJ
Cation-Anion Balance (± 5%)	1.71	%		0.01	SM 1030E	11/07/2013 1441 JJ
Solids, Total Dissolved (Calc)	860	mg/L		10	SM 1030E	11/07/2013 1441 JJ

These results apply only to the samples tested.

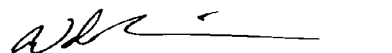
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-008  
**ClientSample ID:** 5368-32-23SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 10:15:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 2113	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/28/2013 1940	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/28/2013 1940	MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/28/2013 2113	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/28/2013 1940	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 2113	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1940	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 2113	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/28/2013 1940	MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/05/2013 1036	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/28/2013 1940	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 2113	DG
Selenium	0.005	mg/L		0.005	EPA 200.8	10/28/2013 1940	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/28/2013 1940	MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	10/28/2013 1940	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/28/2013 1940	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 2113	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	11/05/2013 1207	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	10/29/2013 2043	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 2043	DG

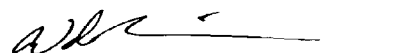
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/2/2013  
**Report ID:** S1310420001

**ProjectName:** Kendrick  
**Lab ID:** S1310420-008  
**ClientSample ID:** 5368-32-23SM  
**COC:** 151970 151964

**WorkOrder:** S1310420  
**CollectionDate:** 10/25/2013 10:15:00 AM  
**DateReceived:** 10/28/2013 6:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.1	pCi/L		2	SM 7110B	11/25/2013 022	SH
Gross Alpha Precision (±)	1.7	pCi/L			SM 7110B	11/25/2013 022	SH
Gross Beta	4.3	pCi/L		3	SM 7110B	11/25/2013 022	SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	11/25/2013 022	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/16/2013 829	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/16/2013 829	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/13/2013 929	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/13/2013 929	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/15/2013 759	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/15/2013 759	MB

## These results apply only to the samples tested.

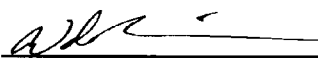
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-002  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 12:00:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.49	s.u.			Field	10/22/2013 1200
Conductivity	1634	µmhos/cm			Field	10/22/2013 1200
Dissolved Oxygen	1.73	mg/L			Field	10/22/2013 1200
Dissolved Oxygen (pct)	16.0	%			Field	10/22/2013 1200
Turbidity	1.56	NTU			Field	10/22/2013 1200
Temperature	12.3	°C			Field	10/22/2013 1200
Oxygen Reduction Potential (ORP)	-44	mV			Field	10/22/2013 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	495	mg/L		5	SM 2320B	10/25/2013 1400 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	533	mg/L		5	SM 2320B	10/25/2013 1400 KV
Alkalinity, Carbonate as CO <sub>3</sub>	35	mg/L		5	SM 2320B	10/25/2013 1400 KV
Chloride	9	mg/L		1	EPA 300.0	10/24/2013 2357 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	10/25/2013 1400 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/24/2013 1129 RH
Sulfate	295	mg/L		1	EPA 300.0	10/24/2013 2357 AMB
Calcium	3	mg/L		1	EPA 200.7	10/24/2013 1648 DG
Magnesium	1	mg/L		1	EPA 200.7	10/24/2013 1648 DG
Potassium	5	mg/L		1	EPA 200.7	10/24/2013 1648 DG
Sodium	370	mg/L		1	EPA 200.7	10/24/2013 1648 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	10/31/2013 949 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	10/25/2013 1400 KV
Electrical Conductivity	1600	µmhos/cm		5	SM 2510B	10/25/2013 1400 KV
Total Dissolved Solids (180)	980	mg/L		10	SM 2540	10/24/2013 847 EC
<b>Data Quality</b>						
Cation Sum	16.50	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Anion Sum	16.35	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Cation-Anion Balance (± 5%)	0.45	%		0.01	SM 1030E	10/31/2013 1531 LJK
Solids, Total Dissolved (Calc)	980	mg/L		10	SM 1030E	10/31/2013 1531 LJK

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-002  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 12:00:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/24/2013 1648	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/24/2013 1323	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/24/2013 1323	MS
Boron	0.5	mg/L		0.1	EPA 200.7	10/24/2013 1648	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/24/2013 1323	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/24/2013 1648	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/24/2013 1323	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/24/2013 1648	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/24/2013 1323	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/25/2013 1144	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/24/2013 1323	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/24/2013 1648	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/24/2013 1323	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/24/2013 1323	MS
Uranium	0.0100	mg/L		0.0003	EPA 200.8	10/24/2013 1323	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/24/2013 1323	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/24/2013 1648	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/29/2013 2231	MS
<b>Metals - Total</b>							
Iron	0.07	mg/L		0.05	EPA 200.7	10/25/2013 1744	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/25/2013 1744	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-002  
**ClientSample ID:** 5368-41-36OZ  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 12:00:00 PM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	19.6	pCi/L		3	SM 7110B	10/30/2013 2300	SH
Gross Alpha Precision (±)	3.5	pCi/L			SM 7110B	10/30/2013 2300	SH
Gross Beta	ND	pCi/L		6	SM 7110B	10/30/2013 2300	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	10/30/2013 2300	SH
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/02/2013 1221	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/02/2013 1221	WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/04/2013 330	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/04/2013 330	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

## These results apply only to the samples tested.

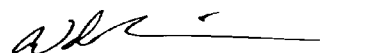
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-001  
**ClientSample ID:** 5368-41-36SM  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 11:10:00 AM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.21	s.u.			Field	10/22/2013 1110
Conductivity	1523	µmhos/cm			Field	10/22/2013 1110
Dissolved Oxygen	2.34	mg/L			Field	10/22/2013 1110
Dissolved Oxygen (pct)	21.3	%			Field	10/22/2013 1110
Turbidity	263	NTU			Field	10/22/2013 1110
Temperature	11.1	°C			Field	10/22/2013 1110
Oxygen Reduction Potential (ORP)	-93	mV			Field	10/22/2013 1110
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	503	mg/L		5	SM 2320B	10/25/2013 1349 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	418	mg/L		5	SM 2320B	10/25/2013 1349 KV
Alkalinity, Carbonate as CO <sub>3</sub>	96	mg/L		5	SM 2320B	10/25/2013 1349 KV
Chloride	6	mg/L		1	EPA 300.0	10/24/2013 2343 AMB
Fluoride	1.7	mg/L		0.1	SM 4500FC	10/25/2013 1349 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/24/2013 1128 RH
Sulfate	240	mg/L		1	EPA 300.0	10/24/2013 2343 AMB
Calcium	2	mg/L		1	EPA 200.7	10/24/2013 1635 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/24/2013 1635 DG
Potassium	8	mg/L		1	EPA 200.7	10/24/2013 1635 DG
Sodium	338	mg/L		1	EPA 200.7	10/24/2013 1635 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	10/31/2013 948 RH
<b>General Parameters</b>						
pH	9.5	s.u.		0.1	SM 4500 H B	10/25/2013 1349 KV
Electrical Conductivity	1470	µmhos/cm		5	SM 2510B	10/25/2013 1349 KV
Total Dissolved Solids (180)	940	mg/L		10	SM 2540	10/24/2013 846 EC
<b>Data Quality</b>						
Cation Sum	14.98	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Anion Sum	15.33	meq/L		0.01	SM 1030E	10/31/2013 1531 LJK
Cation-Anion Balance (± 5%)	1.14	%		0.01	SM 1030E	10/31/2013 1531 LJK
Solids, Total Dissolved (Calc)	900	mg/L		10	SM 1030E	10/31/2013 1531 LJK

These results apply only to the samples tested.

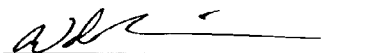
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-001  
**ClientSample ID:** 5368-41-36SM  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 11:10:00 AM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	10/24/2013 1635	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/24/2013 1318	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/24/2013 1318	MS
Boron	0.4	mg/L		0.1	EPA 200.7	10/24/2013 1635	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/24/2013 1318	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/24/2013 1635	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/24/2013 1318	MS
Iron	0.06	mg/L		0.05	EPA 200.7	10/24/2013 1635	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/24/2013 1318	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/25/2013 1142	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/24/2013 1318	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/24/2013 1635	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/24/2013 1318	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/24/2013 1318	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	10/24/2013 1318	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/24/2013 1318	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/24/2013 1635	DG
<b>Metals - Suspended</b>							
Uranium	0.0004	mg/L		0.0003	EPA 200.8	10/29/2013 2226	MS
<b>Metals - Total</b>							
Iron	10.2	mg/L		0.05	EPA 200.7	10/25/2013 1739	DG
Manganese	0.16	mg/L		0.02	EPA 200.7	10/25/2013 1739	DG

## These results apply only to the samples tested.

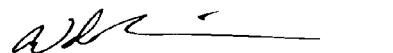
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310373001

**ProjectName:** Kendrick  
**Lab ID:** S1310373-001  
**ClientSample ID:** 5368-41-36SM  
**COC:** 151972

**WorkOrder:** S1310373  
**CollectionDate:** 10/22/2013 11:10:00 AM  
**DateReceived:** 10/23/2013 8:03:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		3	SM 7110B	10/30/2013 2300 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	10/30/2013 2300 SH
Gross Beta	7.2	pCi/L		5	SM 7110B	10/30/2013 2300 SH
Gross Beta Precision (±)	3.1	pCi/L			SM 7110B	10/30/2013 2300 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 000 SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/02/2013 920 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/02/2013 920 WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/04/2013 330 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/04/2013 330 MB
<b>Radionuclides - Suspended</b>						
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000 SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/12/2013 000 SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000 MB

## These results apply only to the samples tested.

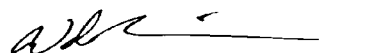
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-002  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 11:05:00 AM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.58	s.u.			Field	10/23/2013 1105
Conductivity	1422	µmhos/cm			Field	10/23/2013 1105
Dissolved Oxygen	2.20	mg/L			Field	10/23/2013 1105
Dissolved Oxygen (pct)	21.4	%			Field	10/23/2013 1105
Turbidity	1.20	NTU			Field	10/23/2013 1105
Temperature	13.6	°C			Field	10/23/2013 1105
Oxygen Reduction Potential (ORP)	-93	mV			Field	10/23/2013 1105
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	451	mg/L		5	SM 2320B	10/28/2013 1313 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	468	mg/L		5	SM 2320B	10/28/2013 1313 KV
Alkalinity, Carbonate as CO <sub>3</sub>	41	mg/L		5	SM 2320B	10/28/2013 1313 KV
Chloride	11	mg/L		1	EPA 300.0	10/26/2013 1348 AMB
Fluoride	1.3	mg/L		0.1	SM 4500FC	10/28/2013 1313 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1206 RH
Sulfate	194	mg/L		1	EPA 300.0	10/26/2013 1348 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 1515 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 1515 DG
Potassium	3	mg/L		1	EPA 200.7	10/28/2013 1515 DG
Sodium	316	mg/L		1	EPA 200.7	10/28/2013 1515 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	10/31/2013 1020 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	10/28/2013 1313 KV
Electrical Conductivity	1430	µmhos/cm		5	SM 2510B	10/28/2013 1313 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	10/28/2013 908 EC
<b>Data Quality</b>						
Cation Sum	13.94	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Anion Sum	13.43	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Cation-Anion Balance (± 5%)	1.87	%		0.01	SM 1030E	10/31/2013 1522 LJK
Solids, Total Dissolved (Calc)	800	mg/L		10	SM 1030E	10/31/2013 1522 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-002  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 11:05:00 AM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1515	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/25/2013 1930	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/25/2013 1930	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/28/2013 1515	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/25/2013 1930	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1515	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/25/2013 1930	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1515	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/25/2013 1930	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1052	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/25/2013 1930	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1515	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/25/2013 1930	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/25/2013 1930	MS
Uranium	0.0291	mg/L		0.0003	EPA 200.8	10/25/2013 1930	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/25/2013 1930	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1515	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 009	MS
<b>Metals - Total</b>							
Iron	0.08	mg/L		0.05	EPA 200.7	10/29/2013 012	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 012	DG

These results apply only to the samples tested.

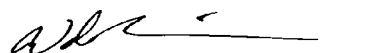
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-002  
**ClientSample ID:** 5368-31-35OZ  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 11:05:00 AM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	91.8	pCi/L		3	SM 7110B	11/02/2013 917	SH
Gross Alpha Precision (±)	5.7	pCi/L			SM 7110B	11/02/2013 917	SH
Gross Beta	11.5	pCi/L		5	SM 7110B	11/02/2013 917	SH
Gross Beta Precision (±)	2.9	pCi/L			SM 7110B	11/02/2013 917	SH
Radium 226	4.8	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	0.3	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/04/2013 1137	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/04/2013 1137	WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/06/2013 310	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/06/2013 310	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-003  
**ClientSample ID:** 5368-31-35SM  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 12:00:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.00	s.u.			Field	10/23/2013 1200
Conductivity	1417	µmhos/cm			Field	10/23/2013 1200
Dissolved Oxygen	2.04	mg/L			Field	10/23/2013 1200
Dissolved Oxygen (pct)	19.4	%			Field	10/23/2013 1200
Turbidity	2.31	NTU			Field	10/23/2013 1200
Temperature	13.2	°C			Field	10/23/2013 1200
Oxygen Reduction Potential (ORP)	-108	mV			Field	10/23/2013 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	407	mg/L		5	SM 2320B	10/28/2013 1322 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	350	mg/L		5	SM 2320B	10/28/2013 1322 KV
Alkalinity, Carbonate as CO <sub>3</sub>	72	mg/L		5	SM 2320B	10/28/2013 1322 KV
Chloride	21	mg/L		1	EPA 300.0	10/26/2013 1401 AMB
Fluoride	2.2	mg/L		0.1	SM 4500FC	10/28/2013 1322 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1207 RH
Sulfate	213	mg/L		1	EPA 300.0	10/26/2013 1401 AMB
Calcium	1	mg/L		1	EPA 200.7	10/28/2013 1517 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 1517 DG
Potassium	15	mg/L		1	EPA 200.7	10/28/2013 1517 DG
Sodium	309	mg/L		1	EPA 200.7	10/28/2013 1517 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	10/31/2013 1021 RH
<b>General Parameters</b>						
pH	9.4	s.u.		0.1	SM 4500 H B	10/28/2013 1322 KV
Electrical Conductivity	1480	µmhos/cm		5	SM 2510B	10/28/2013 1322 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	10/28/2013 909 EC
<b>Data Quality</b>						
Cation Sum	13.86	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Anion Sum	13.26	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Cation-Anion Balance (± 5%)	2.19	%		0.01	SM 1030E	10/31/2013 1522 LJK
Solids, Total Dissolved (Calc)	800	mg/L		10	SM 1030E	10/31/2013 1522 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-003  
**ClientSample ID:** 5368-31-35SM  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 12:00:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1517	DG
Arsenic	0.010	mg/L		0.005	EPA 200.8	10/25/2013 1935	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/25/2013 1935	MS
Boron	0.4	mg/L		0.1	EPA 200.7	10/28/2013 1517	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/25/2013 1935	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1517	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/25/2013 1935	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1517	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/25/2013 1935	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1054	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/25/2013 1935	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1517	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/25/2013 1935	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/25/2013 1935	MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	10/25/2013 1935	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/25/2013 1935	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1517	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 015	MS
<b>Metals - Total</b>							
Iron	0.15	mg/L		0.05	EPA 200.7	10/29/2013 019	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 019	DG

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-003  
**ClientSample ID:** 5368-31-35SM  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 12:00:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	11/02/2013 2124	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	11/02/2013 2124	SH
Gross Beta	11.6	pCi/L		4	SM 7110B	11/02/2013 2124	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	11/02/2013 2124	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/08/2013 2135	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/08/2013 2135	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/06/2013 310	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/06/2013 310	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-001  
**ClientSample ID:** 5368-31-35SA  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 9:40:00 AM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.47	s.u.			Field	10/23/2013 940
Conductivity	1434	µmhos/cm			Field	10/23/2013 940
Dissolved Oxygen	1.64	mg/L			Field	10/23/2013 940
Dissolved Oxygen (pct)	14.4	%			Field	10/23/2013 940
Turbidity	18.07	NTU			Field	10/23/2013 940
Temperature	9.9	°C			Field	10/23/2013 940
Oxygen Reduction Potential (ORP)	-155	mV			Field	10/23/2013 940
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	667	mg/L		5	SM 2320B	10/28/2013 1304 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	724	mg/L		5	SM 2320B	10/28/2013 1304 KV
Alkalinity, Carbonate as CO <sub>3</sub>	44	mg/L		5	SM 2320B	10/28/2013 1304 KV
Chloride	5	mg/L		1	EPA 300.0	10/26/2013 1335 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	10/28/2013 1304 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1205 RH
Sulfate	79	mg/L		1	EPA 300.0	10/26/2013 1335 AMB
Calcium	4	mg/L		1	EPA 200.7	10/28/2013 1512 DG
Magnesium	2	mg/L		1	EPA 200.7	10/28/2013 1512 DG
Potassium	8	mg/L		1	EPA 200.7	10/28/2013 1512 DG
Sodium	332	mg/L		1	EPA 200.7	10/28/2013 1512 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	10/31/2013 1019 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	10/28/2013 1304 KV
Electrical Conductivity	1480	µmhos/cm		5	SM 2510B	10/28/2013 1304 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	10/28/2013 907 EC
<b>Data Quality</b>						
Cation Sum	14.95	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Anion Sum	15.11	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Cation-Anion Balance (± 5%)	0.52	%		0.01	SM 1030E	10/31/2013 1522 LJK
Solids, Total Dissolved (Calc)	830	mg/L		10	SM 1030E	10/31/2013 1522 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-001  
**ClientSample ID:** 5368-31-35SA  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 9:40:00 AM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1512 DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	10/25/2013 1924 MS
Barium	ND	mg/L		0.5	EPA 200.8	10/25/2013 1924 MS
Boron	0.1	mg/L		0.1	EPA 200.7	10/28/2013 1512 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/25/2013 1924 MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1512 DG
Copper	ND	mg/L		0.01	EPA 200.8	10/25/2013 1924 MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1512 DG
Lead	ND	mg/L		0.02	EPA 200.8	10/25/2013 1924 MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1050 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/25/2013 1924 MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1512 DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/25/2013 1924 MS
Silver	ND	mg/L		0.003	EPA 200.8	10/25/2013 1924 MS
Uranium	0.0043	mg/L		0.0003	EPA 200.8	10/25/2013 1924 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/25/2013 1924 MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1512 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 004 MS
<b>Metals - Total</b>						
Iron	0.96	mg/L		0.05	EPA 200.7	10/29/2013 007 DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 007 DG

## These results apply only to the samples tested.

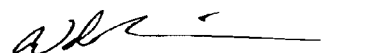
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-001  
**ClientSample ID:** 5368-31-35SA  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 9:40:00 AM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.1	pCi/L		3	SM 7110B	11/02/2013 917	SH
Gross Alpha Precision (±)	2.4	pCi/L			SM 7110B	11/02/2013 917	SH
Gross Beta	ND	pCi/L		5	SM 7110B	11/02/2013 917	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/02/2013 917	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/04/2013 836	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/04/2013 836	WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/06/2013 935	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/06/2013 935	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

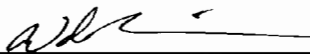
## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-003  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 12:35:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.61	s.u.			Field	10/24/2013 1235
Conductivity	1429	µmhos/cm			Field	10/24/2013 1235
Dissolved Oxygen	2.52	mg/L			Field	10/24/2013 1235
Dissolved Oxygen (pct)	24.2	%			Field	10/24/2013 1235
Turbidity	20.7	NTU			Field	10/24/2013 1235
Temperature	13.2	°C			Field	10/24/2013 1235
Oxygen Reduction Potential (ORP)	-126	mV			Field	10/24/2013 1235
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	428	mg/L		5	SM 2320B	10/28/2013 2056 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	435	mg/L		5	SM 2320B	10/28/2013 2056 KV
Alkalinity, Carbonate as CO <sub>3</sub>	43	mg/L		5	SM 2320B	10/28/2013 2056 KV
Chloride	6	mg/L		1	EPA 300.0	10/28/2013 1326 AMB
Fluoride	1.1	mg/L		0.1	SM 4500FC	10/28/2013 2056 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1214 RH
Sulfate	229	mg/L		1	EPA 300.0	10/28/2013 1326 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 1835 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 1835 DG
Potassium	4	mg/L		1	EPA 200.7	10/28/2013 1835 DG
Sodium	319	mg/L		1	EPA 200.7	10/28/2013 1835 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	10/31/2013 1032 RH
<b>General Parameters</b>						
pH	9.0	s.u.		0.1	SM 4500 H B	10/28/2013 2056 KV
Electrical Conductivity	1500	µmhos/cm		5	SM 2510B	10/28/2013 2056 KV
Total Dissolved Solids (180)	900	mg/L		10	SM 2540	10/28/2013 959 EC
<b>Data Quality</b>						
Cation Sum	14.08	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Anion Sum	13.54	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Cation-Anion Balance (± 5%)	1.95	%		0.01	SM 1030E	11/01/2013 1559 BC
Solids, Total Dissolved (Calc)	820	mg/L		10	SM 1030E	11/01/2013 1559 BC

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-003  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 12:35:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1835	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/26/2013 050	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/26/2013 050	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/28/2013 1835	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/26/2013 050	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1835	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/26/2013 050	MS
Iron	0.05	mg/L		0.05	EPA 200.7	10/28/2013 1835	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/26/2013 050	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1239	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/26/2013 050	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1835	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/26/2013 050	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/26/2013 050	MS
Uranium	0.0012	mg/L		0.0003	EPA 200.8	10/26/2013 050	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/26/2013 050	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1835	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 236	MS
<b>Metals - Total</b>							
Iron	1.09	mg/L		0.05	EPA 200.7	10/29/2013 1806	DG
Manganese	0.02	mg/L		0.02	EPA 200.7	10/29/2013 1806	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-003  
**ClientSample ID:** 5368-12-25OZ  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 12:35:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	11/02/2013 2124	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	11/02/2013 2124	SH
Gross Beta	ND	pCi/L		5	SM 7110B	11/02/2013 2124	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/02/2013 2124	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/08/2013 930	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/08/2013 930	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/07/2013 803	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/07/2013 803	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2013 815	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2013 815	MB

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-005  
**ClientSample ID:** 5368-12-25SM  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 1:40:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.85	s.u.			Field	10/24/2013 1340
Conductivity	1353	µmhos/cm			Field	10/24/2013 1340
Dissolved Oxygen	2.85	mg/L			Field	10/24/2013 1340
Dissolved Oxygen (pct)	27.8	%			Field	10/24/2013 1340
Turbidity	12.22	NTU			Field	10/24/2013 1340
Temperature	13.8	°C			Field	10/24/2013 1340
Oxygen Reduction Potential (ORP)	-115	mV			Field	10/24/2013 1340
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	399	mg/L		5	SM 2320B	10/28/2013 2116 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	390	mg/L		5	SM 2320B	10/28/2013 2116 KV
Alkalinity, Carbonate as CO <sub>3</sub>	48	mg/L		5	SM 2320B	10/28/2013 2116 KV
Chloride	10	mg/L		1	EPA 300.0	10/28/2013 1352 AMB
Fluoride	1.4	mg/L		0.1	SM 4500FC	10/28/2013 2116 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/01/2013 1146 RH
Sulfate	198	mg/L		1	EPA 300.0	10/28/2013 1352 AMB
Calcium	1	mg/L		1	EPA 200.7	10/28/2013 1840 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 1840 DG
Potassium	6	mg/L		1	EPA 200.7	10/28/2013 1840 DG
Sodium	290	mg/L		1	EPA 200.7	10/28/2013 1840 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	10/31/2013 1034 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	10/28/2013 2116 KV
Electrical Conductivity	1410	µmhos/cm		5	SM 2510B	10/28/2013 2116 KV
Total Dissolved Solids (180)	830	mg/L		10	SM 2540	10/28/2013 1001 EC
<b>Data Quality</b>						
Cation Sum	12.86	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Anion Sum	12.46	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Cation-Anion Balance (± 5%)	1.58	%		0.01	SM 1030E	11/01/2013 1559 BC
Solids, Total Dissolved (Calc)	750	mg/L		10	SM 1030E	11/01/2013 1559 BC

## These results apply only to the samples tested.

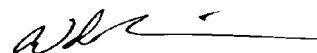
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-005  
**ClientSample ID:** 5368-12-25SM  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 1:40:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1840 DG
Arsenic	0.010	mg/L		0.005	EPA 200.8	10/26/2013 101 MS
Barium	ND	mg/L		0.5	EPA 200.8	10/26/2013 101 MS
Boron	0.4	mg/L		0.1	EPA 200.7	10/28/2013 1840 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/26/2013 101 MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1840 DG
Copper	ND	mg/L		0.01	EPA 200.8	10/26/2013 101 MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1840 DG
Lead	ND	mg/L		0.02	EPA 200.8	10/26/2013 101 MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1253 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/26/2013 101 MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1840 DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/26/2013 101 MS
Silver	ND	mg/L		0.003	EPA 200.8	10/26/2013 101 MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	10/26/2013 101 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/26/2013 101 MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1840 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 314 MS
<b>Metals - Total</b>						
Iron	0.69	mg/L		0.05	EPA 200.7	10/29/2013 1810 DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 1810 DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-005  
**ClientSample ID:** 5368-12-25SM  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 1:40:00 PM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		3	SM 7110B	11/03/2013 1854 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	11/03/2013 1854 SH
Gross Beta	ND	pCi/L		5	SM 7110B	11/03/2013 1854 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/03/2013 1854 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/13/2013 908 SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/08/2013 1532 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/08/2013 1532 MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/11/2013 1216 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/11/2013 1216 MB
<b>Radionuclides - Suspended</b>						
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701 SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701 SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2013 815 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2013 815 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 9:40:00 AM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.31	s.u.			Field	10/24/2013 940
Conductivity	1427	µmhos/cm			Field	10/24/2013 940
Dissolved Oxygen	1.77	mg/L			Field	10/24/2013 940
Dissolved Oxygen (pct)	15.5	%			Field	10/24/2013 940
Turbidity	13.85	NTU			Field	10/24/2013 940
Temperature	8.8	°C			Field	10/24/2013 940
Oxygen Reduction Potential (ORP)	-89	mV			Field	10/24/2013 940
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	553	mg/L		5	SM 2320B	10/28/2013 2037 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	675	mg/L		5	SM 2320B	10/28/2013 2037 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	10/28/2013 2037 KV
Chloride	2	mg/L		1	EPA 300.0	10/28/2013 1259 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	10/28/2013 2037 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1212 RH
Sulfate	164	mg/L		1	EPA 300.0	10/28/2013 1259 AMB
Calcium	36	mg/L		1	EPA 200.7	10/28/2013 1817 DG
Magnesium	19	mg/L		1	EPA 200.7	10/28/2013 1817 DG
Potassium	28	mg/L		1	EPA 200.7	10/28/2013 1817 DG
Sodium	247	mg/L		1	EPA 200.7	10/28/2013 1817 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	10/31/2013 1030 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	10/28/2013 2037 KV
Electrical Conductivity	1490	µmhos/cm		5	SM 2510B	10/28/2013 2037 KV
Total Dissolved Solids (180)	870	mg/L		10	SM 2540	10/28/2013 957 EC
<b>Data Quality</b>						
Cation Sum	14.81	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Anion Sum	14.52	meq/L		0.01	SM 1030E	11/01/2013 1559 BC
Cation-Anion Balance (± 5%)	0.97	%		0.01	SM 1030E	11/01/2013 1559 BC
Solids, Total Dissolved (Calc)	830	mg/L		10	SM 1030E	11/01/2013 1559 BC

## These results apply only to the samples tested.

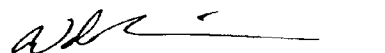
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 9:40:00 AM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	10/28/2013 1817	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	10/26/2013 024	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/26/2013 024	MS
Boron	0.1	mg/L		0.1	EPA 200.7	10/28/2013 1817	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/26/2013 024	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1817	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/26/2013 024	MS
Iron	1.98	mg/L		0.05	EPA 200.7	10/28/2013 1817	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/26/2013 024	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1235	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/26/2013 024	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1817	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/26/2013 024	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/26/2013 024	MS
Uranium	0.0024	mg/L		0.0003	EPA 200.8	10/26/2013 024	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/26/2013 024	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1817	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 231	MS
<b>Metals - Total</b>							
Iron	1.50	mg/L		0.05	EPA 200.7	10/29/2013 1748	DG
Manganese	0.07	mg/L		0.02	EPA 200.7	10/29/2013 1748	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/26/2013  
**Report ID:** S1310418001

**ProjectName:** Kendrick  
**Lab ID:** S1310418-001  
**ClientSample ID:** 5368-12-25SA  
**COC:** 151963

**WorkOrder:** S1310418  
**CollectionDate:** 10/24/2013 9:40:00 AM  
**DateReceived:** 10/25/2013 7:55:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.4	pCi/L		3	SM 7110B	11/02/2013 2124	SH
Gross Alpha Precision (±)	1.8	pCi/L			SM 7110B	11/02/2013 2124	SH
Gross Beta	15.6	pCi/L		5	SM 7110B	11/02/2013 2124	SH
Gross Beta Precision (±)	3.1	pCi/L			SM 7110B	11/02/2013 2124	SH
Radium 226	0.7	pCi/L		0.2	SM 7500 Ra-B	11/13/2013 908	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/13/2013 908	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/08/2013 328	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/08/2013 328	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/07/2013 803	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/07/2013 803	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 1701	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 1701	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2013 815	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2013 815	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310359001

**ProjectName:** Kendrick  
**Lab ID:** S1310359-002  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 151962

**WorkOrder:** S1310359  
**CollectionDate:** 10/21/2013 4:30:00 PM  
**DateReceived:** 10/22/2013 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.81	s.u.			Field	10/21/2013 1630
Conductivity	1396	µmhos/cm			Field	10/21/2013 1630
Dissolved Oxygen	1.97	mg/L			Field	10/21/2013 1630
Dissolved Oxygen (pct)	18.7	%			Field	10/21/2013 1630
Turbidity	21.8	NTU			Field	10/21/2013 1630
Temperature	13.5	°C			Field	10/21/2013 1630
Oxygen Reduction Potential (ORP)	-58	mV			Field	10/21/2013 1630
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	443	mg/L		5	SM 2320B	10/23/2013 2046 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	432	mg/L		5	SM 2320B	10/23/2013 2046 KV
Alkalinity, Carbonate as CO <sub>3</sub>	54	mg/L		5	SM 2320B	10/23/2013 2046 KV
Chloride	8	mg/L		1	EPA 300.0	10/24/2013 2317 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	10/23/2013 2046 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/24/2013 1125 RH
Sulfate	264	mg/L		1	EPA 300.0	10/24/2013 2317 AMB
Calcium	1	mg/L		1	EPA 200.7	10/24/2013 1624 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/24/2013 1624 DG
Potassium	8	mg/L		1	EPA 200.7	10/24/2013 1624 DG
Sodium	311	mg/L		1	EPA 200.7	10/24/2013 1624 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	10/24/2013 1642 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	10/23/2013 2046 KV
Electrical Conductivity	1320	µmhos/cm		5	SM 2510B	10/23/2013 2046 KV
Total Dissolved Solids (180)	840	mg/L		10	SM 2540	10/23/2013 1506 EC
<b>Data Quality</b>						
Cation Sum	13.83	meq/L		0.01	SM 1030E	10/28/2013 1520 CJM
Anion Sum	14.61	meq/L		0.01	SM 1030E	10/28/2013 1520 CJM
Cation-Anion Balance (± 5%)	2.75	%		0.01	SM 1030E	10/28/2013 1520 CJM
Solids, Total Dissolved (Calc)	860	mg/L		10	SM 1030E	10/28/2013 1520 CJM

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310359001

**ProjectName:** Kendrick  
**Lab ID:** S1310359-002  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 151962

**WorkOrder:** S1310359  
**CollectionDate:** 10/21/2013 4:30:00 PM  
**DateReceived:** 10/22/2013 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	0.2	mg/L		0.1	EPA 200.7	10/24/2013 1624	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/23/2013 1544	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/23/2013 1544	MS
Boron	0.1	mg/L		0.1	EPA 200.7	10/24/2013 1624	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/23/2013 1544	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/24/2013 1624	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/23/2013 1544	MS
Iron	0.06	mg/L		0.05	EPA 200.7	10/24/2013 1624	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/23/2013 1544	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/25/2013 1138	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/23/2013 1544	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/24/2013 1624	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/23/2013 1544	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/23/2013 1544	MS
Uranium	0.0285	mg/L		0.0003	EPA 200.8	10/23/2013 1544	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/23/2013 1544	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/24/2013 1624	DG
<b>Metals - Suspended</b>							
Uranium	0.0003	mg/L		0.0003	EPA 200.8	10/29/2013 156	MS
<b>Metals - Total</b>							
Iron	0.51	mg/L		0.05	EPA 200.7	10/24/2013 2112	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/24/2013 2112	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310359001

**ProjectName:** Kendrick  
**Lab ID:** S1310359-002  
**ClientSample ID:** 5268-21-11OZ  
**COC:** 151962

**WorkOrder:** S1310359  
**CollectionDate:** 10/21/2013 4:30:00 PM  
**DateReceived:** 10/22/2013 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	73.1	pCi/L		2	SM 7110B	10/30/2013 2300	SH
Gross Alpha Precision (±)	4.6	pCi/L			SM 7110B	10/30/2013 2300	SH
Gross Beta	14.2	pCi/L		3	SM 7110B	10/30/2013 2300	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	10/30/2013 2300	SH
Radium 226	1.4	pCi/L		0.2	SM 7500 Ra-B	11/11/2013 1629	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/11/2013 1629	SH
Radium 228	ND	pCi/L		1	Ga-Tech	10/29/2013 2255	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	10/29/2013 2255	WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/04/2013 1125	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/04/2013 1125	MB
<b>Radionuclides - Suspended</b>							
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	11/11/2013 1629	SH
Radium 226 (Suspended) Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/11/2013 1629	SH
Thorium 230	0.2	pCi/L		0.2	ACW10	11/05/2013 800	MB
Thorium 230 Precision (±)	0.1	pCi/L			ACW10	11/05/2013 800	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310359001

**ProjectName:** Kendrick  
**Lab ID:** S1310359-001  
**ClientSample ID:** 5268-21-11SM  
**COC:** 151962

**WorkOrder:** S1310359  
**CollectionDate:** 10/21/2013 4:10:00 PM  
**DateReceived:** 10/22/2013 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.97	s.u.			Field	10/21/2013 1610
Conductivity	1368	µmhos/cm			Field	10/21/2013 1610
Dissolved Oxygen	1.80	mg/L			Field	10/21/2013 1610
Dissolved Oxygen (pct)	17.1	%			Field	10/21/2013 1610
Turbidity	5.32	NTU			Field	10/21/2013 1610
Temperature	13.0	°C			Field	10/21/2013 1610
Oxygen Reduction Potential (ORP)	-57	mV			Field	10/21/2013 1610
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	350	mg/L		5	SM 2320B	10/23/2013 2034 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	321	mg/L		5	SM 2320B	10/23/2013 2034 KV
Alkalinity, Carbonate as CO <sub>3</sub>	52	mg/L		5	SM 2320B	10/23/2013 2034 KV
Chloride	22	mg/L		1	EPA 300.0	10/24/2013 2303 AMB
Fluoride	1.5	mg/L		0.1	SM 4500FC	10/23/2013 2034 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/24/2013 1124 RH
Sulfate	314	mg/L		1	EPA 300.0	10/24/2013 2303 AMB
Calcium	3	mg/L		1	EPA 200.7	10/24/2013 1622 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/24/2013 1622 DG
Potassium	6	mg/L		1	EPA 200.7	10/24/2013 1622 DG
Sodium	292	mg/L		1	EPA 200.7	10/24/2013 1622 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	10/24/2013 1641 RH
<b>General Parameters</b>						
pH	9.4	s.u.		0.1	SM 4500 H B	10/23/2013 2034 KV
Electrical Conductivity	1300	µmhos/cm		5	SM 2510B	10/23/2013 2034 KV
Total Dissolved Solids (180)	810	mg/L		10	SM 2540	10/23/2013 1505 EC
<b>Data Quality</b>						
Cation Sum	13.00	meq/L		0.01	SM 1030E	10/28/2013 1520 CJM
Anion Sum	14.24	meq/L		0.01	SM 1030E	10/28/2013 1520 CJM
Cation-Anion Balance (± 5%)	4.55	%		0.01	SM 1030E	10/28/2013 1520 CJM
Solids, Total Dissolved (Calc)	850	mg/L		10	SM 1030E	10/28/2013 1520 CJM

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310359001

**ProjectName:** Kendrick  
**Lab ID:** S1310359-001  
**ClientSample ID:** 5268-21-11SM  
**COC:** 151962

**WorkOrder:** S1310359  
**CollectionDate:** 10/21/2013 4:10:00 PM  
**DateReceived:** 10/22/2013 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/24/2013 1622	DG
Arsenic	0.018	mg/L		0.005	EPA 200.8	10/23/2013 1539	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/23/2013 1539	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/24/2013 1622	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/23/2013 1539	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/24/2013 1622	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/23/2013 1539	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/24/2013 1622	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/23/2013 1539	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/25/2013 1136	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/23/2013 1539	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/24/2013 1622	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/23/2013 1539	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/23/2013 1539	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/23/2013 1539	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/23/2013 1539	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/24/2013 1622	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/29/2013 150	MS
<b>Metals - Total</b>							
Iron	0.10	mg/L		0.05	EPA 200.7	10/24/2013 2101	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/24/2013 2101	DG

These results apply only to the samples tested.

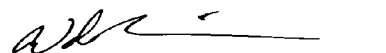
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 11/21/2013  
**Report ID:** S1310359001

**ProjectName:** Kendrick  
**Lab ID:** S1310359-001  
**ClientSample ID:** 5268-21-11SM  
**COC:** 151962

**WorkOrder:** S1310359  
**CollectionDate:** 10/21/2013 4:10:00 PM  
**DateReceived:** 10/22/2013 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	10/30/2013 2300	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	10/30/2013 2300	SH
Gross Beta	4.5	pCi/L		3	SM 7110B	10/30/2013 2300	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	10/30/2013 2300	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/11/2013 1629	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/11/2013 1629	SH
Radium 228	ND	pCi/L		1	Ga-Tech	10/29/2013 1954	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	10/29/2013 1954	WN
Thorium 230	ND	pCi/L		0.2	ACW10	11/04/2013 1125	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/04/2013 1125	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/11/2013 1629	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/11/2013 1629	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/05/2013 800	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/05/2013 800	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-006  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 4:15:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.87	s.u.			Field	10/23/2013 1615
Conductivity	1242	µmhos/cm			Field	10/23/2013 1615
Dissolved Oxygen	1.97	mg/L			Field	10/23/2013 1615
Dissolved Oxygen (pct)	18.9	%			Field	10/23/2013 1615
Turbidity	2.83	NTU			Field	10/23/2013 1615
Temperature	13.2	°C			Field	10/23/2013 1615
Oxygen Reduction Potential (ORP)	-68	mV			Field	10/23/2013 1615
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	420	mg/L		5	SM 2320B	10/28/2013 1350 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	383	mg/L		5	SM 2320B	10/28/2013 1350 KV
Alkalinity, Carbonate as CO <sub>3</sub>	64	mg/L		5	SM 2320B	10/28/2013 1350 KV
Chloride	3	mg/L		1	EPA 300.0	10/26/2013 1441 AMB
Fluoride	0.8	mg/L		0.1	SM 4500FC	10/28/2013 1350 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1210 RH
Sulfate	161	mg/L		1	EPA 300.0	10/26/2013 1441 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 1523 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 1523 DG
Potassium	5	mg/L		1	EPA 200.7	10/28/2013 1523 DG
Sodium	271	mg/L		1	EPA 200.7	10/28/2013 1523 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	10/31/2013 1029 RH
<b>General Parameters</b>						
pH	9.3	s.u.		0.1	SM 4500 H B	10/28/2013 1350 KV
Electrical Conductivity	1280	µmhos/cm		5	SM 2510B	10/28/2013 1350 KV
Total Dissolved Solids (180)	750	mg/L		10	SM 2540	10/28/2013 912 EC
<b>Data Quality</b>						
Cation Sum	12.00	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Anion Sum	11.88	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Cation-Anion Balance (± 5%)	0.52	%		0.01	SM 1030E	10/31/2013 1522 LJK
Solids, Total Dissolved (Calc)	690	mg/L		10	SM 1030E	10/31/2013 1522 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-006  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 4:15:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1523	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/25/2013 2003	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/25/2013 2003	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/28/2013 1523	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/25/2013 2003	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1523	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/28/2013 1352	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1523	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/25/2013 2003	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1059	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/25/2013 2003	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1523	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/25/2013 2003	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/25/2013 2003	MS
Uranium	0.0091	mg/L		0.0003	EPA 200.8	10/25/2013 2003	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/25/2013 2003	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1523	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 109	MS
<b>Metals - Total</b>							
Iron	0.16	mg/L		0.05	EPA 200.7	10/29/2013 033	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 033	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-006  
**ClientSample ID:** 5268-12-01OZ  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 4:15:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	14.6	pCi/L		2	SM 7110B	11/02/2013 2124	SH
Gross Alpha Precision (±)	2.4	pCi/L			SM 7110B	11/02/2013 2124	SH
Gross Beta	7.8	pCi/L		4	SM 7110B	11/02/2013 2124	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	11/02/2013 2124	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/09/2013 638	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/09/2013 638	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/06/2013 310	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/06/2013 310	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

These results apply only to the samples tested.

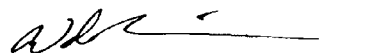
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-005  
**ClientSample ID:** 5268-12-01SM  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 3:00:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.73	s.u.			Field	10/23/2013 1500
Conductivity	1942	1942			Field	10/23/2013 1500
Dissolved Oxygen	2.29	mg/L			Field	10/23/2013 1500
Dissolved Oxygen (pct)	21.7	%			Field	10/23/2013 1500
Turbidity	12.59	NTU			Field	10/23/2013 1500
Temperature	13.3	°C			Field	10/23/2013 1500
Oxygen Reduction Potential (ORP)	-66	mV			Field	10/23/2013 1500
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	230	mg/L		5	SM 2320B	10/28/2013 1341 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	94	mg/L		5	SM 2320B	10/28/2013 1341 KV
Alkalinity, Carbonate as CO <sub>3</sub>	92	mg/L		5	SM 2320B	10/28/2013 1341 KV
Chloride	18	mg/L		1	EPA 300.0	10/26/2013 1428 AMB
Fluoride	1.7	mg/L		0.1	SM 4500FC	10/28/2013 1341 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1209 RH
Sulfate	571	mg/L		1	EPA 300.0	10/26/2013 1428 AMB
Calcium	2	mg/L		1	EPA 200.7	10/28/2013 1521 DG
Magnesium	ND	mg/L		1	EPA 200.7	10/28/2013 1521 DG
Potassium	12	mg/L		1	EPA 200.7	10/28/2013 1521 DG
Sodium	399	mg/L		1	EPA 200.7	10/28/2013 1521 DG
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	10/31/2013 1028 RH
<b>General Parameters</b>						
pH	10.1	s.u.		0.1	SM 4500 H B	10/28/2013 1341 KV
Electrical Conductivity	2000	µmhos/cm		5	SM 2510B	10/28/2013 1341 KV
Total Dissolved Solids (180)	1210	mg/L		10	SM 2540	10/28/2013 911 EC
<b>Data Quality</b>						
Cation Sum	17.76	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Anion Sum	17.07	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Cation-Anion Balance (± 5%)	1.99	%		0.01	SM 1030E	10/31/2013 1522 LJK
Solids, Total Dissolved (Calc)	1140	mg/L		10	SM 1030E	10/31/2013 1522 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-005  
**ClientSample ID:** 5268-12-01SM  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 3:00:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1521 DG
Arsenic	0.011	mg/L		0.005	EPA 200.8	10/25/2013 1946 MS
Barium	ND	mg/L		0.5	EPA 200.8	10/25/2013 1946 MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/28/2013 1521 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/25/2013 1946 MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1521 DG
Copper	ND	mg/L		0.01	EPA 200.8	10/25/2013 1946 MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1521 DG
Lead	ND	mg/L		0.02	EPA 200.8	10/25/2013 1946 MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1058 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/25/2013 1946 MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1521 DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/25/2013 1946 MS
Silver	ND	mg/L		0.003	EPA 200.8	10/25/2013 1946 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	10/25/2013 1946 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/25/2013 1946 MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1521 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 026 MS
<b>Metals - Total</b>						
Iron	0.35	mg/L		0.05	EPA 200.7	10/29/2013 030 DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 030 DG

## These results apply only to the samples tested.

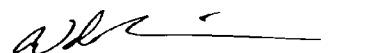
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-005  
**ClientSample ID:** 5268-12-01SM  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 3:00:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.0	pCi/L		3	SM 7110B	11/02/2013 2124	SH
Gross Alpha Precision (±)	2.3	pCi/L			SM 7110B	11/02/2013 2124	SH
Gross Beta	11.5	pCi/L		7	SM 7110B	11/02/2013 2124	SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	11/02/2013 2124	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/09/2013 337	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/09/2013 337	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/06/2013 310	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/06/2013 310	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-004  
**ClientSample ID:** 5268-12-01SA  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 2:20:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.46	s.u.			Field	10/23/2013 1420
Conductivity	1339	µmhos/cm			Field	10/23/2013 1420
Dissolved Oxygen	1.47	mg/L			Field	10/23/2013 1420
Dissolved Oxygen (pct)	13.4	%			Field	10/23/2013 1420
Turbidity	7.13	NTU			Field	10/23/2013 1420
Temperature	11.2	°C			Field	10/23/2013 1420
Oxygen Reduction Potential (ORP)	-49	mV			Field	10/23/2013 1420
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	522	mg/L		5	SM 2320B	10/28/2013 1332 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	558	mg/L		5	SM 2320B	10/28/2013 1332 KV
Alkalinity, Carbonate as CO <sub>3</sub>	39	mg/L		5	SM 2320B	10/28/2013 1332 KV
Chloride	4	mg/L		1	EPA 300.0	10/26/2013 1415 AMB
Fluoride	0.9	mg/L		0.1	SM 4500FC	10/28/2013 1332 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/29/2013 1208 RH
Sulfate	128	mg/L		1	EPA 300.0	10/26/2013 1415 AMB
Calcium	3	mg/L		1	EPA 200.7	10/28/2013 1519 DG
Magnesium	1	mg/L		1	EPA 200.7	10/28/2013 1519 DG
Potassium	6	mg/L		1	EPA 200.7	10/28/2013 1519 DG
Sodium	298	mg/L		1	EPA 200.7	10/28/2013 1519 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	10/31/2013 1022 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	10/28/2013 1332 KV
Electrical Conductivity	1350	µmhos/cm		5	SM 2510B	10/28/2013 1332 KV
Total Dissolved Solids (180)	810	mg/L		10	SM 2540	10/28/2013 910 EC
<b>Data Quality</b>						
Cation Sum	13.38	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Anion Sum	13.24	meq/L		0.01	SM 1030E	10/31/2013 1522 LJK
Cation-Anion Balance (± 5%)	0.51	%		0.01	SM 1030E	10/31/2013 1522 LJK
Solids, Total Dissolved (Calc)	750	mg/L		10	SM 1030E	10/31/2013 1522 LJK

## These results apply only to the samples tested.

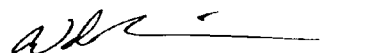
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-004  
**ClientSample ID:** 5268-12-01SA  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 2:20:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	10/28/2013 1519	DG
Arsenic	0.012	mg/L		0.005	EPA 200.8	10/25/2013 1941	MS
Barium	ND	mg/L		0.5	EPA 200.8	10/25/2013 1941	MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/28/2013 1519	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/25/2013 1941	MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/28/2013 1519	DG
Copper	ND	mg/L		0.01	EPA 200.8	10/25/2013 1941	MS
Iron	ND	mg/L		0.05	EPA 200.7	10/28/2013 1519	DG
Lead	ND	mg/L		0.02	EPA 200.8	10/25/2013 1941	MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/29/2013 1056	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/25/2013 1941	MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/28/2013 1519	DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/25/2013 1941	MS
Silver	ND	mg/L		0.003	EPA 200.8	10/25/2013 1941	MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	10/25/2013 1941	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/25/2013 1941	MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/28/2013 1519	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	10/30/2013 020	MS
<b>Metals - Total</b>							
Iron	0.42	mg/L		0.05	EPA 200.7	10/29/2013 021	DG
Manganese	ND	mg/L		0.02	EPA 200.7	10/29/2013 021	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 12/5/2013  
**Report ID:** S1310405002  
(Replaces S1310405001)

**ProjectName:** Kendrick  
**Lab ID:** S1310405-004  
**ClientSample ID:** 5268-12-01SA  
**COC:** 151971

**WorkOrder:** S1310405  
**CollectionDate:** 10/23/2013 2:20:00 PM  
**DateReceived:** 10/24/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.9	pCi/L		2	SM 7110B	11/02/2013 2124	SH
Gross Alpha Precision (±)	1.7	pCi/L			SM 7110B	11/02/2013 2124	SH
Gross Beta	5.7	pCi/L		5	SM 7110B	11/02/2013 2124	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	11/02/2013 2124	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/14/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/14/2013 000	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/09/2013 036	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/09/2013 036	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/06/2013 310	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/06/2013 310	MB
<b>Radionuclides - Suspended</b>							
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/12/2013 000	SH
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/12/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/08/2013 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/08/2013 000	MB

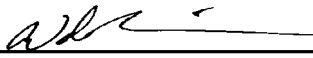
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 19XX18 Date: 2-16-11 Time: 1600

**Landowner**

Name: Merit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE NW

SEC 19

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Industrial  
Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50917W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.97

Cond. 2.86 mS

Temp. °C 12.1°C

Turbidity (ntu) 0.54

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water is fizzy - clear - no odor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** 22X-19 **Date:** 2-17-11 **Time:** 1440

**Landowner**

**Name:** Merit Energy

**Address** \_\_\_\_\_

**Phone#** \_\_\_\_\_

**Legal Location**

**Qtr/Qtr** SE NW

**SEC** 19

**TWN** 53

**RNG** 67

**Picture #(s)** \_\_\_\_\_

Industrial  
~~Stock~~ ☒

**Domestic** \_\_\_\_\_

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** P50917W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 9.12

**Cond.** 1971  $\mu$ S

**Temp. °C** 11.2

**Turbidity (ntu)** 1.88

**D.O. (mg/L)** \_\_\_\_\_

**Water Level (ft):** —

**% Combustible Gas:** \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** \_\_\_\_\_

**Comments:** Water foggy - clear - no odor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: CSWELL 01 Date: 2-10-11 Time: 1420

**Landowner**

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW/NW

SEC 20

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P132537W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.76

Cond. 1569

Temp. °C 3.9

Turbidity (ntu) 0.78

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Strong/Otwell well by houses. - water  
clear no odor.

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: DW WELL 01 Date: 2-15-11 Time: 1450

**Landowner**

Name: Wood

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNW

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 8.89

Cond. 3.02 MS

Temp. °C 9.1

Turbidity (ntu) 4.72

D.O. (mg/L) \_\_\_\_\_

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: 2-10-11 Time: 1200

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 5

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P 7324P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.03

Cond. 1601

Temp. °C 8.0

Turbidity (ntu) 9.28

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: —

Casing Height (ft): —

Ambient Air Temp: —

Comments: Water slightly turbid - water clear  
no odor. Stock well on west side of New  
Haven road north of Oshato.

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HB WELL 05 Date: 2-10-11 Time: 1240

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7430P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.95

Cond. 1483

Temp. °C 7.3

Turbidity (ntu) 33.8

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly turbid - no odor - stock  
well on east side of New Haven road by  
Oshoto field office.

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P17177W Date: 3-1-11 Time: 1630

**Landowner**

Name: Buech

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE NW

SEC 1

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P17177W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.94

Cond. 796  $\mu$ S

Temp. °C 7.8

Turbidity (ntu) 0.04

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stock tank well next to creek -  
Water clear - no odor



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P50113W Date: 3-1-11 Time: 1530

**Landowner**

Name: Bunk

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50113W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.97

Cond. 1479

Temp. °C 6.6

Turbidity (ntu) 0.27

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stock well below main facilities.

Water clear - no odor.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61006W Date: 2-16-11 Time: 1400

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61006W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.57

Cond. 1037

Temp. °C 9.0

Turbidity (ntu) 0.80

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Took sample from inside Jim and Helene house. water clear - no odor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61007W Date: 2-16-11 Time: 1330

**Landowner**

Name: HAHN

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWSW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61007W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 9.26

Cond. 1112

Temp. °C 6.6

Turbidity (ntu) 1.23

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - Took sample  
from inside white house. Hahn's want  
there water tested from inside there  
houses during the winter

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P71108W Date: 3-1-11 Time: 1600

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SENE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P71108W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.90

Cond. 1527  $\mu$ S

Temp. °C 7.8

Turbidity (ntu) 1.21

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Dallas and Annai house well -  
water clear - no odor

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** P84665W **Date:** 3-1-11 **Time:** 1430

**Landowner**

**Name:** Burch

**Address** \_\_\_\_\_

**Phone#** \_\_\_\_\_

**Legal Location**

**Qtr/Qtr** NW/NW

**SEC** 2

**TWN** 53

**RNG** 68

**Picture #(s)** \_\_\_\_\_

**Stock** ✓

**Domestic** \_\_\_\_\_

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** P84665W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 7.84

**Cond.** 1016 µS

**Temp. °C** 7.1

**Turbidity (ntu)** 0.31

**D.O. (mg/L)** —

**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: SB WELL 01 Date: 3-1-11 Time: 1500

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

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 9.24

Cond. 1143  $\mu$ S

Temp. °C 7.4

Turbidity (ntu) 0.47

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stormy and Beckley's house well - water  
clear - no odor

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TW01 Date: 2-10-11 Time: 1110

**Landowner**

Name: TJ Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) —

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.50

Cond. 1794

Temp. °C 10.8

Turbidity (ntu) 0.68

D.O. (mg/L) —

Water Level (ft): —

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): —

Ambient Air Temp: \_\_\_\_\_

Comments: Collected sample from inside house  
facet. Water clear no odor. T.J's house well

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TW02 Date: 2-10-11 Time: 1300

**Landowner**

Name: TJ Wealey

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SW SW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P103666W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.47

Cond. 1963

Temp. °C 7.0

Turbidity (ntu) 0.88

D.O. (mg/L) —

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Well at Strata Oshoto Field Office.  
Water collected from inside office parcel.  
Water clear-no odor.





## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/29/2011  
**Report ID:** S1102224001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102224-003  
**ClientSample ID:** 19XX18  
**COC:** 137094

**WorkOrder:** S1102224  
**CollectionDate:** 2/16/2011 4:00:00 PM  
**DateReceived:** 2/17/2011 8:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.97	s.u.			Field	2/16/2011 4:00:00 PM
Conductivity	2870	µmhos/cm			Field	2/16/2011 4:00:00 PM
Turbidity	0.54	NTU			Field	2/16/2011 4:00:00 PM
Temperature	12.1	°C			Field	2/16/2011 4:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	567	mg/L		5	SM 2320B	2/18/2011 5:11:09 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	655	mg/L		5	SM 2320B	2/18/2011 5:11:09 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	18	mg/L		5	SM 2320B	2/18/2011 5:11:09 PM AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	2/18/2011 5:11:09 PM AMB
Chloride	6	mg/L		1	EPA 300.0	2/18/2011 5:59:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/24/2011 4:44:00 PM AS
Sulfate	617	mg/L		1	EPA 300.0	2/18/2011 5:59:00 PM KO
Calcium	7	mg/L		1	EPA 200.7	2/18/2011 3:29:52 PM DG
Magnesium	2	mg/L		1	EPA 200.7	2/18/2011 3:29:52 PM DG
Potassium	4	mg/L		1	EPA 200.7	2/18/2011 3:29:52 PM DG
Sodium	592	mg/L		1	EPA 200.7	3/22/2011 5:33:17 PM DG
Nitrogen, Ammonia (As N)	0.6	mg/L		0.1	EPA 350.1	2/18/2011 1:31:00 PM AS
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	2/18/2011 5:11:09 PM AMB
Electrical Conductivity	2220	µmhos/cm		5	SM 2510B	2/18/2011 5:11:09 PM AMB
Total Dissolved Solids (180)	1690	mg/L		10	SM 2540	2/18/2011 11:30:00 AM JF
<b>Data Quality</b>						
Cation Sum	24.66	meq/L		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Anion Sum	24.38	meq/L		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Cation-Anion Balance (± 5%)	0.57	%		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Solids, Total Dissolved (Calc)	1530	mg/L		10	SM 1030E	3/15/2011 9:30:11 AM WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/29/2011  
**Report ID:** S1102224001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102224-003  
**ClientSample ID:** 19XX18  
**COC:** 137094

**WorkOrder:** S1102224  
**CollectionDate:** 2/16/2011 4:00:00 PM  
**DateReceived:** 2/17/2011 8:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/18/2011 3:29:52 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/17/2011 6:37:16 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/17/2011 6:37:16 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	2/18/2011 3:29:52 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/17/2011 6:37:16 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:29:52 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/17/2011 6:37:16 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/18/2011 3:29:52 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:37:16 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/23/2011 10:25:33 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:37:16 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:29:52 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/17/2011 6:37:16 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/17/2011 6:37:16 PM	MS
Uranium	0.0726	mg/L		0.0003	EPA 200.8	2/17/2011 6:37:16 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:37:16 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:29:52 PM	DG
<b>Metals - Total</b>							
Iron	0.08	mg/L		0.05	EPA 200.7	2/21/2011 5:41:29 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	2/21/2011 5:41:29 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	267	pCi/L		5	SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Alpha Precision (±)	13	pCi/L			SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Beta	116	pCi/L		8	SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Beta Precision (±)	6.0	pCi/L			SM 7110B	3/16/2011 6:02:04 PM	SH
Radium 226	31.1	pCi/L		0.2	SM 7500-Ra B	3/4/2011 5:05:11 PM	SH
Radium 226 Precision (±)	1.1	pCi/L			SM 7500-Ra B	3/4/2011 5:05:11 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/7/2011 4:33:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/7/2011 4:33:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/30/2011  
**Report ID:** S1102244001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102244-001  
**ClientSample ID:** 22X-19  
**COC:** 136431

**WorkOrder:** S1102244  
**CollectionDate:** 2/17/2011 2:40:00 PM  
**DateReceived:** 2/18/2011 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.12	s.u.			Field	2/17/2011 2:40:00 PM
Conductivity	1971	µmhos/cm			Field	2/17/2011 2:40:00 PM
Turbidity	1.88	NTU			Field	2/17/2011 2:40:00 PM
Temperature	11.2	°C			Field	2/17/2011 2:40:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	475	mg/L		5	SM 2320B	2/23/2011 7:19:46 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	527	mg/L		5	SM 2320B	2/23/2011 7:19:46 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	26	mg/L		5	SM 2320B	2/23/2011 7:19:46 PM AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	2/21/2011 3:08:01 PM AMB
Chloride	13	mg/L		1	EPA 300.0	2/21/2011 10:31:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/24/2011 5:04:00 PM AS
Sulfate	569	mg/L		1	EPA 300.0	2/23/2011 3:14:00 PM KO
Calcium	6	mg/L		1	EPA 200.7	2/22/2011 2:59:05 PM DG
Magnesium	2	mg/L		1	EPA 200.7	2/22/2011 2:59:05 PM DG
Potassium	5	mg/L		1	EPA 200.7	2/22/2011 2:59:05 PM DG
Sodium	537	mg/L		1	EPA 200.7	2/22/2011 2:59:05 PM DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	2/24/2011 3:28:00 PM AS
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	2/21/2011 3:08:01 PM AMB
Electrical Conductivity	2010	µmhos/cm		5	SM 2510B	2/21/2011 3:08:01 PM AMB
Total Dissolved Solids (180)	1470	mg/L		10	SM 2540	2/21/2011 4:15:00 PM JF
<b>Data Quality</b>						
Cation Sum	23.90	meq/L		0.00	SM 1030E	2/28/2011 10:14:35 AM KO
Anion Sum	21.74	meq/L		0.00	SM 1030E	2/28/2011 10:14:35 AM KO
Cation-Anion Balance (± 5%)	4.71	%		0.00	SM 1030E	2/28/2011 10:14:35 AM KO
Solids, Total Dissolved (Calc)	1420	mg/L		10	SM 1030E	2/28/2011 10:14:35 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/30/2011  
**Report ID:** S1102244001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102244-001  
**ClientSample ID:** 22X-19  
**COC:** 136431

**WorkOrder:** S1102244  
**CollectionDate:** 2/17/2011 2:40:00 PM  
**DateReceived:** 2/18/2011 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/21/2011 4:11:27 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/21/2011 3:33:26 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/21/2011 3:33:26 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	2/21/2011 4:11:27 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/21/2011 3:33:26 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/21/2011 4:11:27 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/21/2011 3:33:26 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/21/2011 4:11:27 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/21/2011 3:33:26 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/23/2011 1:01:56 PM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/21/2011 3:33:26 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/21/2011 4:11:27 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/21/2011 3:33:26 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/21/2011 3:33:26 PM	MS
Uranium	0.0213	mg/L		0.0003	EPA 200.8	2/21/2011 3:33:26 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/21/2011 3:33:26 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/21/2011 4:11:27 PM	DG
<b>Metals - Total</b>							
Iron	0.06	mg/L		0.05	EPA 200.7	2/22/2011 5:03:55 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	2/22/2011 5:03:55 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	42.6	pCi/L		4	SM 7110B	3/17/2011 10:19:48 AM	SH
Gross Alpha Precision (±)	6.6	pCi/L			SM 7110B	3/17/2011 10:19:48 AM	SH
Gross Beta	ND	pCi/L		7	SM 7110B	3/17/2011 10:19:48 AM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	3/17/2011 10:19:48 AM	SH
Radium 226	2.8	pCi/L		0.2	SM 7500-Ra B	3/9/2011 3:54:01 PM	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500-Ra B	3/9/2011 3:54:01 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/17/2011 4:40:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/17/2011 4:40:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-005  
**ClientSample ID:** CS WELL01  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 2:20:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.76	s.u.			Field	2/10/2011 2:20:00 PM
Conductivity	1569	µmhos/cm			Field	2/10/2011 2:20:00 PM
Turbidity	0.78	NTU			Field	2/10/2011 2:20:00 PM
Temperature	3.9	°C			Field	2/10/2011 2:20:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	641	mg/L		5	SM 2320B	2/11/2011 4:10:38 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	759	mg/L		5	SM 2320B	2/11/2011 4:10:38 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	11	mg/L		5	SM 2320B	2/11/2011 4:10:38 PM AMB
Chloride	3	mg/L		1	EPA 300.0	2/11/2011 7:32:00 PM KO
Fluoride	0.3	mg/L		0.1	SM 4500FC	2/14/2011 10:59:49 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/21/2011 1:22:00 PM AS
Sulfate	244	mg/L		1	EPA 300.0	2/11/2011 7:32:00 PM KO
Calcium	10	mg/L		1	EPA 200.7	2/11/2011 2:25:09 PM DG
Magnesium	6	mg/L		1	EPA 200.7	2/11/2011 2:25:09 PM DG
Potassium	8	mg/L		1	EPA 200.7	2/11/2011 2:25:09 PM DG
Sodium	414	mg/L		1	EPA 200.7	2/11/2011 2:25:09 PM DG
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	2/11/2011 4:10:38 PM AMB
Electrical Conductivity	1550	µmhos/cm		5	SM 2510B	2/11/2011 4:10:38 PM AMB
Total Dissolved Solids (180)	1150	mg/L		10	SM 2540	2/11/2011 3:55:00 PM JF
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	2/16/2011 12:49:00 PM AS
<b>Data Quality</b>						
Cation Sum	19.22	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Anion Sum	17.99	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Cation-Anion Balance	3.30	%		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Solids, Total Dissolved (Calc)	1070	mg/L		10	SM 1030E	2/23/2011 1:28:02 PM WN
Calculated TDS/TDS Ratio	1.08			0.01	Calculation	2/25/2011 10:23:00 AM WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-005  
**ClientSample ID:** CS WELL01  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 2:20:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/11/2011 2:25:09 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:30:56 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/11/2011 2:30:56 PM	MS
Boron	0.3	mg/L		0.1	EPA 200.7	2/11/2011 2:25:09 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/11/2011 2:30:56 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:25:09 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/11/2011 2:30:56 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/11/2011 2:25:09 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:30:56 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/15/2011 11:50:28 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:30:56 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:25:09 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:30:56 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/11/2011 2:30:56 PM	MS
Uranium	0.004	mg/L		0.001	EPA 200.8	2/11/2011 2:30:56 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:30:56 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:25:09 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	2/14/2011 5:07:31 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	2/14/2011 5:07:31 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		5	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Alpha Precision (±)	ND	pCi/L		5	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta	ND	pCi/L		7	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta Precision (±)	ND	pCi/L		7	SM 7110B	2/18/2011 10:06:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 228 Precision (±)	ND	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH

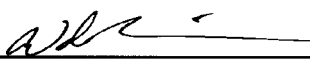
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/7/2011  
**Report ID:** S1102189001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102189-004  
**ClientSample ID:** DW WELL01  
**COC:** 137095

**WorkOrder:** S1102189  
**CollectionDate:** 2/15/2011 2:50:00 PM  
**DateReceived:** 2/16/2011 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.89	s.u.			Field	2/15/2011 2:50:00 PM
Conductivity	3020	µmhos/cm			Field	2/15/2011 2:50:00 PM
Turbidity	4.72	NTU			Field	2/15/2011 2:50:00 PM
Temperature	9.1	°C			Field	2/15/2011 2:50:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	564	mg/L		5	SM 2320B	2/17/2011 2:56:52 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	657	mg/L		5	SM 2320B	2/17/2011 2:56:52 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	15	mg/L		5	SM 2320B	2/17/2011 2:56:52 PM AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	2/17/2011 2:56:52 PM AMB
Chloride	8	mg/L		1	EPA 300.0	2/17/2011 5:21:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/21/2011 2:13:00 PM AS
Sulfate	666	mg/L		1	EPA 300.0	2/17/2011 5:21:00 PM KO
Calcium	15	mg/L		1	EPA 200.7	2/17/2011 12:19:19 PM DG
Magnesium	6	mg/L		1	EPA 200.7	2/17/2011 12:19:19 PM DG
Potassium	13	mg/L		1	EPA 200.7	2/17/2011 12:19:19 PM DG
Sodium	601	mg/L		1	EPA 200.7	2/17/2011 12:19:19 PM DG
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	2/18/2011 12:51:00 PM AS
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	2/17/2011 2:56:52 PM AMB
Electrical Conductivity	2240	µmhos/cm		5	SM 2510B	2/17/2011 2:56:52 PM AMB
Total Dissolved Solids (180)	1760	mg/L		10	SM 2540	2/17/2011 11:30:00 AM JF
<b>Data Quality</b>						
Cation Sum	27.68	meq/L		0.00	SM 1030E	2/22/2011 8:48:27 AM KO
Anion Sum	25.38	meq/L		0.00	SM 1030E	2/22/2011 8:48:27 AM KO
Cation-Anion Balance (± 5%)	4.32	%		0.00	SM 1030E	2/22/2011 8:48:27 AM KO
Solids, Total Dissolved (Calc)	1650	mg/L		10	SM 1030E	2/22/2011 8:48:27 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 3/7/2011  
**Report ID:** S1102189001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102189-004  
**ClientSample ID:** DW WELL01  
**COC:** 137095

**WorkOrder:** S1102189  
**CollectionDate:** 2/15/2011 2:50:00 PM  
**DateReceived:** 2/16/2011 8:00:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/17/2011 12:19:19 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/17/2011 10:45:40 AM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/17/2011 10:45:40 AM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	2/17/2011 12:19:19 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/17/2011 10:45:40 AM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/17/2011 12:19:19 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/17/2011 10:45:40 AM	MS
Iron	0.54	mg/L		0.05	EPA 200.7	2/17/2011 12:19:19 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/17/2011 10:45:40 AM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/22/2011 11:43:16 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/17/2011 10:45:40 AM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/17/2011 12:19:19 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/17/2011 10:45:40 AM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/17/2011 10:45:40 AM	MS
Uranium	ND	mg/L		0.001	EPA 200.8	2/17/2011 10:45:40 AM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/17/2011 10:45:40 AM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/17/2011 12:19:19 PM	DG
<b>Metals - Total</b>							
Iron	1.22	mg/L		0.05	EPA 200.7	2/17/2011 4:21:12 PM	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	2/17/2011 4:21:12 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	5.2	pCi/L		5	SM 7110B	3/3/2011 11:25:59 AM	SH
Gross Alpha Precision (±)	5.2	pCi/L		5	SM 7110B	3/3/2011 11:25:59 AM	SH
Gross Beta	ND	pCi/L		8	SM 7110B	3/3/2011 11:25:59 AM	SH
Gross Beta Precision (±)	ND	pCi/L		8	SM 7110B	3/3/2011 11:25:59 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	2/25/2011 5:26:00 PM	SH
Radium 228 Precision (±)	ND	pCi/L		1	Ra-05	2/25/2011 5:26:00 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	2/25/2011 10:25:00 AM	SH
Radium 226 Precision (±)	0.1	pCi/L		0.2	SM 7500-Ra B	2/25/2011 10:25:00 AM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-002  
**ClientSample ID:** HB WELL03  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 12:00:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.03	s.u.			Field	2/10/2011 12:00:00 PM
Conductivity	1601	µmhos/cm			Field	2/10/2011 12:00:00 PM
Turbidity	9.28	NTU			Field	2/10/2011 12:00:00 PM
Temperature	8.0	°C			Field	2/10/2011 12:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	531	mg/L		5	SM 2320B	2/11/2011 3:37:27 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	647	mg/L		5	SM 2320B	2/11/2011 3:37:27 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	2/11/2011 3:37:27 PM AMB
Chloride	11	mg/L		1	EPA 300.0	2/11/2011 6:58:00 PM KO
Fluoride	0.3	mg/L		0.1	SM 4500FC	2/14/2011 10:50:01 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/21/2011 1:19:00 PM AS
Sulfate	433	mg/L		1	EPA 300.0	2/11/2011 6:58:00 PM KO
Calcium	81	mg/L		1	EPA 200.7	2/11/2011 2:18:15 PM DG
Magnesium	41	mg/L		1	EPA 200.7	2/11/2011 2:18:15 PM DG
Potassium	20	mg/L		1	EPA 200.7	2/11/2011 2:18:15 PM DG
Sodium	305	mg/L		1	EPA 200.7	2/11/2011 2:18:15 PM DG
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	2/11/2011 3:37:27 PM AMB
Electrical Conductivity	1660	µmhos/cm		5	SM 2510B	2/11/2011 3:37:27 PM AMB
Total Dissolved Solids (180)	1360	mg/L		10	SM 2540	2/11/2011 3:35:00 PM JF
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	2/16/2011 12:40:00 PM AS
<b>Data Quality</b>						
Cation Sum	21.18	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Anion Sum	19.94	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Cation-Anion Balance	3.02	%		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Solids, Total Dissolved (Calc)	1210	mg/L		10	SM 1030E	2/23/2011 1:28:02 PM WN
Calculated TDS/TDS Ratio	1.13			0.01	Calculation	2/25/2011 10:23:00 AM WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-002  
**ClientSample ID:** HB WELL03  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 12:00:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/11/2011 2:18:15 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:13:02 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/11/2011 2:13:02 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	2/11/2011 2:18:15 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/11/2011 2:13:02 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:18:15 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/11/2011 2:13:02 PM	MS
Iron	4.83	mg/L		0.05	EPA 200.7	2/11/2011 2:18:15 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:13:02 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/15/2011 11:07:54 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:13:02 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:18:15 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:13:02 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/11/2011 2:13:02 PM	MS
Uranium	0.002	mg/L		0.001	EPA 200.8	2/11/2011 2:13:02 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:13:02 PM	MS
Zinc	0.02	mg/L		0.01	EPA 200.7	2/11/2011 2:18:15 PM	DG
<b>Metals - Total</b>							
Iron	4.31	mg/L		0.05	EPA 200.7	2/14/2011 4:53:27 PM	DG
Manganese	0.20	mg/L		0.02	EPA 200.7	2/14/2011 4:53:27 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Alpha Precision (±)	ND	pCi/L		4	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta	12.5	pCi/L		7	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta Precision (±)	3.8	pCi/L		7	SM 7110B	2/18/2011 10:06:00 AM	SH
Radium 228	1.1	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 228 Precision (±)	2.2	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 226	0.7	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-003  
**ClientSample ID:** HB WELL05  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 12:40:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.95	s.u.			Field	2/10/2011 12:40:00 PM
Conductivity	1483	µmhos/cm			Field	2/10/2011 12:40:00 PM
Turbidity	33.8	NTU			Field	2/10/2011 12:40:00 PM
Temperature	7.3	°C			Field	2/10/2011 12:40:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	543	mg/L		5	SM 2320B	2/11/2011 3:47:43 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	662	mg/L		5	SM 2320B	2/11/2011 3:47:43 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	2/11/2011 3:47:43 PM AMB
Chloride	4	mg/L		1	EPA 300.0	2/11/2011 7:09:00 PM KO
Fluoride	0.3	mg/L		0.1	SM 4500FC	2/14/2011 10:53:12 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/21/2011 1:20:00 PM AS
Sulfate	383	mg/L		1	EPA 300.0	2/11/2011 7:09:00 PM KO
Calcium	89	mg/L		1	EPA 200.7	2/11/2011 2:20:33 PM DG
Magnesium	38	mg/L		1	EPA 200.7	2/11/2011 2:20:33 PM DG
Potassium	9	mg/L		1	EPA 200.7	2/11/2011 2:20:33 PM DG
Sodium	268	mg/L		1	EPA 200.7	2/11/2011 2:20:33 PM DG
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	2/11/2011 3:47:43 PM AMB
Electrical Conductivity	1530	µmhos/cm		5	SM 2510B	2/11/2011 3:47:43 PM AMB
Total Dissolved Solids (180)	1220	mg/L		10	SM 2540	2/11/2011 3:45:00 PM JF
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	2/16/2011 12:47:00 PM AS
<b>Data Quality</b>						
Cation Sum	19.44	meq/L		0.00	SM 1030E	2/23/2011 1:28:02 PM WN
Anion Sum	18.97	meq/L		0.00	SM 1030E	2/23/2011 1:28:02 PM WN
Cation-Anion Balance	1.22	%		0.00	SM 1030E	2/23/2011 1:28:02 PM WN
Solids, Total Dissolved (Calc)	1120	mg/L		10	SM 1030E	2/23/2011 1:28:02 PM WN
Calculated TDS/TDS Ratio	1.09			0.01	Calculation	2/25/2011 10:23:00 AM WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-003  
**ClientSample ID:** HB WELL05  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 12:40:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/11/2011 2:20:33 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:23:47 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/11/2011 2:23:47 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	2/11/2011 2:20:33 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/11/2011 2:23:47 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:20:33 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/11/2011 2:23:47 PM	MS
Iron	0.35	mg/L		0.05	EPA 200.7	2/11/2011 2:20:33 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:23:47 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/15/2011 11:09:52 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:23:47 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:20:33 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:23:47 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/11/2011 2:23:47 PM	MS
Uranium	0.013	mg/L		0.001	EPA 200.8	2/11/2011 2:23:47 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:23:47 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:20:33 PM	DG
<b>Metals - Total</b>							
Iron	8.02	mg/L		0.05	EPA 200.7	2/14/2011 4:55:48 PM	DG
Manganese	0.15	mg/L		0.02	EPA 200.7	2/14/2011 4:55:48 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	7.7	pCi/L		5	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Alpha Precision (±)	5.1	pCi/L		5	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta	ND	pCi/L		8	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta Precision (±)	ND	pCi/L		8	SM 7110B	2/18/2011 10:06:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 228 Precision (±)	ND	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-006  
**ClientSample ID:** P17177W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 4:30:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.94	s.u.			Field	3/1/2011 4:30:00 PM
Conductivity	796	µmhos/cm			Field	3/1/2011 4:30:00 PM
Turbidity	0.04	NTU			Field	3/1/2011 4:30:00 PM
Temperature	7.8	°C			Field	3/1/2011 4:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	313	mg/L		5	SM 2320B	3/4/2011 1:28:13 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	382	mg/L		5	SM 2320B	3/4/2011 1:28:13 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	3/4/2011 1:28:13 AM AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	3/4/2011 1:28:13 AM AMB
Chloride	18	mg/L		1	EPA 300.0	3/3/2011 9:22:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	14.9	mg/L		0.1	EPA 353.2	3/9/2011 12:00:00 PM AS
Sulfate	45	mg/L		1	EPA 300.0	3/3/2011 9:22:00 PM KO
Calcium	91	mg/L		1	EPA 200.7	3/3/2011 3:00:34 PM DG
Magnesium	23	mg/L		1	EPA 200.7	3/3/2011 3:00:34 PM DG
Potassium	5	mg/L		1	EPA 200.7	3/3/2011 3:00:34 PM DG
Sodium	43	mg/L		1	EPA 200.7	3/3/2011 3:00:34 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	3/11/2011 11:26:00 AM AS
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	3/4/2011 1:28:13 AM AMB
Electrical Conductivity	755	µmhos/cm		5	SM 2510B	3/4/2011 1:28:13 AM AMB
Total Dissolved Solids (180)	500	mg/L		10	SM 2540	3/7/2011 3:25:00 PM JF
<b>Data Quality</b>						
Cation Sum	8.44	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Anion Sum	8.76	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Cation-Anion Balance (± 5%)	1.89	%		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Solids, Total Dissolved (Calc)	430	mg/L		10	SM 1030E	3/10/2011 11:22:25 AM KO

These results apply only to the samples tested.

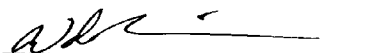
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-006  
**ClientSample ID:** P17177W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 4:30:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	3/3/2011 3:00:34 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	3/3/2011 6:18:21 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	3/3/2011 6:18:21 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	3/3/2011 3:00:34 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	3/3/2011 6:18:21 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	3/3/2011 3:00:34 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	3/3/2011 6:18:21 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	3/3/2011 3:00:34 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:18:21 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/11/2011 9:44:05 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:18:21 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	3/3/2011 3:00:34 PM	DG
Selenium	0.010	mg/L		0.005	EPA 200.8	3/3/2011 6:18:21 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	3/3/2011 6:18:21 PM	MS
Uranium	0.0214	mg/L		0.0003	EPA 200.8	3/3/2011 6:18:21 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:18:21 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	3/3/2011 3:00:34 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	3/4/2011 3:46:29 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	3/4/2011 3:46:29 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	17.1	pCi/L		5	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Alpha Precision (±)	5.6	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta	13.6	pCi/L		7	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta Precision (±)	3.9	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/28/2011 4:52:10 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/28/2011 4:52:10 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-004  
**ClientSample ID:** P50113W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 3:30:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.97	s.u.			Field	3/1/2011 3:30:00 PM
Conductivity	1479	µmhos/cm			Field	3/1/2011 3:30:00 PM
Turbidity	0.27	NTU			Field	3/1/2011 3:30:00 PM
Temperature	6.6	°C			Field	3/1/2011 3:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	535	mg/L		5	SM 2320B	3/4/2011 12:52:21 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	653	mg/L		5	SM 2320B	3/4/2011 12:52:21 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	3/4/2011 12:52:21 AM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	3/4/2011 12:52:21 AM AMB
Chloride	35	mg/L		1	EPA 300.0	3/9/2011 7:45:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	12.2	mg/L		0.1	EPA 353.2	3/9/2011 11:58:00 AM AS
Sulfate	219	mg/L		1	EPA 300.0	3/9/2011 7:45:00 PM KO
Calcium	94	mg/L		1	EPA 200.7	3/8/2011 1:52:26 PM DG
Magnesium	51	mg/L		1	EPA 200.7	3/3/2011 2:53:29 PM DG
Potassium	7	mg/L		1	EPA 200.7	3/8/2011 1:52:26 PM DG
Sodium	201	mg/L		1	EPA 200.7	3/8/2011 1:52:26 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	3/11/2011 11:24:00 AM AS
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	3/4/2011 12:52:21 AM AMB
Electrical Conductivity	1390	µmhos/cm		5	SM 2510B	3/4/2011 12:52:21 AM AMB
Total Dissolved Solids (180)	1050	mg/L		10	SM 2540	3/7/2011 3:10:00 PM JF
<b>Data Quality</b>						
Cation Sum	17.79	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Anion Sum	17.12	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Cation-Anion Balance (± 5%)	1.90	%		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Solids, Total Dissolved (Calc)	940	mg/L		10	SM 1030E	3/10/2011 11:22:25 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-004  
**ClientSample ID:** P50113W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 3:30:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	3/3/2011 2:53:29 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	3/3/2011 6:03:59 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	3/3/2011 6:03:59 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	3/3/2011 2:53:29 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	3/3/2011 6:03:59 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:53:29 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	3/3/2011 6:03:59 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	3/3/2011 2:53:29 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:03:59 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/11/2011 9:39:58 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:03:59 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:53:29 PM	DG
Selenium	0.024	mg/L		0.005	EPA 200.8	3/3/2011 6:03:59 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	3/3/2011 6:03:59 PM	MS
Uranium	0.191	mg/L		0.0003	EPA 200.8	3/3/2011 6:03:59 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:03:59 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:53:29 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	3/4/2011 3:41:51 PM	DG
Manganese	0.60	mg/L		0.02	EPA 200.7	3/4/2011 3:41:51 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	117	pCi/L		6	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Alpha Precision (±)	9.6	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta	51.9	pCi/L		8	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta Precision (±)	4.8	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/28/2011 4:52:10 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/28/2011 4:52:10 PM	SH

These results apply only to the samples tested.

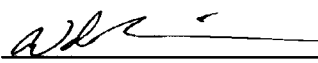
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/29/2011  
**Report ID:** S1102224001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102224-002  
**ClientSample ID:** P61006W  
**COC:** 137094

**WorkOrder:** S1102224  
**CollectionDate:** 2/16/2011 2:00:00 PM  
**DateReceived:** 2/17/2011 8:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.57	s.u.			Field	2/16/2011 2:00:00 PM
Conductivity	1037	µmhos/cm			Field	2/16/2011 2:00:00 PM
Turbidity	0.80	NTU			Field	2/16/2011 2:00:00 PM
Temperature	9.0	°C			Field	2/16/2011 2:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	530	mg/L		5	SM 2320B	2/18/2011 5:00:19 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	636	mg/L		5	SM 2320B	2/18/2011 5:00:19 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	5	mg/L		5	SM 2320B	2/18/2011 5:00:19 PM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	2/18/2011 5:00:19 PM AMB
Chloride	3	mg/L		1	EPA 300.0	2/18/2011 5:48:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	2/24/2011 4:43:00 PM AS
Sulfate	158	mg/L		1	EPA 300.0	2/18/2011 5:48:00 PM KO
Calcium	18	mg/L		1	EPA 200.7	2/22/2011 2:20:01 PM DG
Magnesium	9	mg/L		1	EPA 200.7	2/22/2011 2:20:01 PM DG
Potassium	9	mg/L		1	EPA 200.7	2/22/2011 2:20:01 PM DG
Sodium	299	mg/L		1	EPA 200.7	2/22/2011 2:20:01 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	2/18/2011 1:30:00 PM AS
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	2/18/2011 5:00:19 PM AMB
Electrical Conductivity	1180	µmhos/cm		5	SM 2510B	2/18/2011 5:00:19 PM AMB
Total Dissolved Solids (180)	840	mg/L		10	SM 2540	2/18/2011 11:25:00 AM JF
<b>Data Quality</b>						
Cation Sum	14.88	meq/L		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Anion Sum	13.98	meq/L		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Cation-Anion Balance (± 5%)	3.12	%		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	3/15/2011 9:30:11 AM WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 3/29/2011  
**Report ID:** S1102224001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102224-002  
**ClientSample ID:** P61006W  
**COC:** 137094

**WorkOrder:** S1102224  
**CollectionDate:** 2/16/2011 2:00:00 PM  
**DateReceived:** 2/17/2011 8:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/18/2011 3:27:33 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/17/2011 6:33:41 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/17/2011 6:33:41 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	2/18/2011 3:27:33 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/17/2011 6:33:41 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:27:33 PM	DG
Copper	0.01	mg/L		0.01	EPA 200.8	2/17/2011 6:33:41 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/18/2011 3:27:33 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:33:41 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/23/2011 10:23:34 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:33:41 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:27:33 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/17/2011 6:33:41 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/17/2011 6:33:41 PM	MS
Uranium	0.0019	mg/L		0.0003	EPA 200.8	2/17/2011 6:33:41 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:33:41 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:27:33 PM	DG
<b>Metals - Total</b>							
Iron	0.13	mg/L		0.05	EPA 200.7	2/21/2011 5:29:55 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	2/21/2011 5:29:55 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	6.9	pCi/L		2	SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Alpha Precision (±)	2.8	pCi/L			SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Beta	10.3	pCi/L		4	SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Beta Precision (±)	2.0	pCi/L			SM 7110B	3/16/2011 6:02:04 PM	SH
Radium 226	0.6	pCi/L		0.2	SM 7500-Ra B	3/4/2011 5:05:11 PM	SH
Radium 226 Precision (±)	0.6	pCi/L			SM 7500-Ra B	3/4/2011 5:05:11 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/7/2011 4:33:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/7/2011 4:33:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/29/2011  
**Report ID:** S1102224001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102224-001  
**ClientSample ID:** P61007W  
**COC:** 137094

**WorkOrder:** S1102224  
**CollectionDate:** 2/16/2011 1:30:00 PM  
**DateReceived:** 2/17/2011 8:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.26	s.u.			Field	2/16/2011 1:30:00 PM
Conductivity	1112	µmhos/cm			Field	2/16/2011 1:30:00 PM
Turbidity	1.23	NTU			Field	2/16/2011 1:30:00 PM
Temperature	6.6	°C			Field	2/16/2011 1:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	536	mg/L		5	SM 2320B	2/18/2011 4:49:15 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	617	mg/L		5	SM 2320B	2/18/2011 4:49:15 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	18	mg/L		5	SM 2320B	2/18/2011 4:49:15 PM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	2/18/2011 4:49:15 PM AMB
Chloride	1	mg/L		1	EPA 300.0	2/18/2011 5:37:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.3	mg/L		0.1	EPA 353.2	2/24/2011 4:42:00 PM AS
Sulfate	83	mg/L		1	EPA 300.0	2/18/2011 5:37:00 PM KO
Calcium	3	mg/L		1	EPA 200.7	2/18/2011 3:25:14 PM DG
Magnesium	1	mg/L		1	EPA 200.7	2/18/2011 3:25:14 PM DG
Potassium	3	mg/L		1	EPA 200.7	2/18/2011 3:25:14 PM DG
Sodium	293	mg/L		1	EPA 200.7	2/18/2011 3:25:14 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	2/18/2011 1:29:00 PM AS
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	2/18/2011 4:49:15 PM AMB
Electrical Conductivity	1050	µmhos/cm		5	SM 2510B	2/18/2011 4:49:15 PM AMB
Total Dissolved Solids (180)	730	mg/L		10	SM 2540	2/18/2011 11:20:00 AM JF
<b>Data Quality</b>						
Cation Sum	13.06	meq/L		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Anion Sum	12.50	meq/L		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Cation-Anion Balance (± 5%)	2.19	%		0.00	SM 1030E	3/15/2011 9:30:11 AM WN
Solids, Total Dissolved (Calc)	710	mg/L		10	SM 1030E	3/15/2011 9:30:11 AM WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/29/2011  
**Report ID:** S1102224001

**ProjectName:** ROSS ISR  
**Lab ID:** S1102224-001  
**ClientSample ID:** P61007W  
**COC:** 137094

**WorkOrder:** S1102224  
**CollectionDate:** 2/16/2011 1:30:00 PM  
**DateReceived:** 2/17/2011 8:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/18/2011 3:25:14 PM	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	2/17/2011 6:22:52 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/17/2011 6:22:52 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	2/18/2011 3:25:14 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/17/2011 6:22:52 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:25:14 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/17/2011 6:22:52 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/18/2011 3:25:14 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:22:52 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/23/2011 10:21:38 AM	BK
Molybdenum	0.02	mg/L		0.02	EPA 200.8	2/17/2011 6:22:52 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/18/2011 3:25:14 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/17/2011 6:22:52 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/17/2011 6:22:52 PM	MS
Uranium	0.0021	mg/L		0.0003	EPA 200.8	2/17/2011 6:22:52 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/17/2011 6:22:52 PM	MS
Zinc	0.03	mg/L		0.01	EPA 200.7	2/18/2011 3:25:14 PM	DG
<b>Metals - Total</b>							
Iron	0.08	mg/L		0.05	EPA 200.7	2/21/2011 5:27:37 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	2/21/2011 5:27:37 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.8	pCi/L		2	SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Alpha Precision (±)	2.5	pCi/L			SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	3/16/2011 6:02:04 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	3/16/2011 6:02:04 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	3/4/2011 5:05:11 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	3/4/2011 5:05:11 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/7/2011 4:33:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/7/2011 4:33:00 PM	SH

These results apply only to the samples tested.

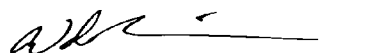
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-005  
**ClientSample ID:** P71108W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 4:00:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.90	s.u.			Field	3/1/2011 4:00:00 PM
Conductivity	1527	µmhos/cm			Field	3/1/2011 4:00:00 PM
Turbidity	1.21	NTU			Field	3/1/2011 4:00:00 PM
Temperature	7.8	°C			Field	3/1/2011 4:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	549	mg/L		5	SM 2320B	3/4/2011 1:17:52 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	670	mg/L		5	SM 2320B	3/4/2011 1:17:52 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	3/4/2011 1:17:52 AM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	3/4/2011 1:17:52 AM AMB
Chloride	5	mg/L		1	EPA 300.0	3/3/2011 9:09:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.1	mg/L		0.1	EPA 353.2	3/9/2011 11:59:00 AM AS
Sulfate	321	mg/L		1	EPA 300.0	3/3/2011 9:09:00 PM KO
Calcium	64	mg/L		1	EPA 200.7	3/3/2011 2:55:52 PM DG
Magnesium	56	mg/L		1	EPA 200.7	3/3/2011 2:55:52 PM DG
Potassium	9	mg/L		1	EPA 200.7	3/3/2011 2:55:52 PM DG
Sodium	252	mg/L		1	EPA 200.7	3/3/2011 2:55:52 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	3/11/2011 11:25:00 AM AS
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	3/4/2011 1:17:52 AM AMB
Electrical Conductivity	1490	µmhos/cm		5	SM 2510B	3/4/2011 1:17:52 AM AMB
Total Dissolved Solids (180)	1170	mg/L		10	SM 2540	3/7/2011 3:20:00 PM JF
<b>Data Quality</b>						
Cation Sum	19.01	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Anion Sum	17.83	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Cation-Anion Balance (± 5%)	3.20	%		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Solids, Total Dissolved (Calc)	1040	mg/L		10	SM 1030E	3/10/2011 11:22:25 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-005  
**ClientSample ID:** P71108W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 4:00:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	3/3/2011 2:55:52 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	3/3/2011 6:07:34 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	3/3/2011 6:07:34 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	3/3/2011 2:55:52 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	3/3/2011 6:07:34 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:55:52 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	3/3/2011 6:07:34 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	3/3/2011 2:55:52 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:07:34 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/11/2011 9:42:25 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:07:34 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:55:52 PM	DG
Selenium	0.014	mg/L		0.005	EPA 200.8	3/3/2011 6:07:34 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	3/3/2011 6:07:34 PM	MS
Uranium	0.0639	mg/L		0.0003	EPA 200.8	3/3/2011 6:07:34 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:07:34 PM	MS
Zinc	0.06	mg/L		0.01	EPA 200.7	3/3/2011 2:55:52 PM	DG
<b>Metals - Total</b>							
Iron	0.15	mg/L		0.05	EPA 200.7	3/4/2011 3:44:10 PM	DG
Manganese	0.22	mg/L		0.02	EPA 200.7	3/4/2011 3:44:10 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	37.9	pCi/L		5	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Alpha Precision (±)	6.4	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta	16.3	pCi/L		7	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta Precision (±)	4.0	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Radium 226	0.4	pCi/L		0.2	SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 228	1.2	pCi/L		1	Ra-05	3/28/2011 4:52:10 PM	SH
Radium 228 Precision (±)	1.7	pCi/L			Ra-05	3/28/2011 4:52:10 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-002  
**ClientSample ID:** P84665W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 2:30:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.84	s.u.			Field	3/1/2011 2:30:00 PM
Conductivity	1016	µmhos/cm			Field	3/1/2011 2:30:00 PM
Turbidity	0.31	NTU			Field	3/1/2011 2:30:00 PM
Temperature	7.1	°C			Field	3/1/2011 2:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	420	mg/L		5	SM 2320B	3/4/2011 12:31:13 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	512	mg/L		5	SM 2320B	3/4/2011 12:31:13 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	3/4/2011 12:31:13 AM AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	3/4/2011 12:31:13 AM AMB
Chloride	10	mg/L		1	EPA 300.0	3/3/2011 8:31:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	1.4	mg/L		0.1	EPA 353.2	3/9/2011 11:50:00 AM AS
Sulfate	108	mg/L		1	EPA 300.0	3/3/2011 8:31:00 PM KO
Calcium	95	mg/L		1	EPA 200.7	3/3/2011 2:48:42 PM DG
Magnesium	40	mg/L		1	EPA 200.7	3/3/2011 2:48:42 PM DG
Potassium	6	mg/L		1	EPA 200.7	3/3/2011 2:48:42 PM DG
Sodium	81	mg/L		1	EPA 200.7	3/3/2011 2:48:42 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	3/11/2011 11:22:00 AM AS
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	3/4/2011 12:31:13 AM AMB
Electrical Conductivity	891	µmhos/cm		5	SM 2510B	3/4/2011 12:31:13 AM AMB
Total Dissolved Solids (180)	700	mg/L		10	SM 2540	3/7/2011 3:00:00 PM JF
<b>Data Quality</b>						
Cation Sum	11.73	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Anion Sum	11.02	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Cation-Anion Balance (± 5%)	3.10	%		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Solids, Total Dissolved (Calc)	590	mg/L		10	SM 1030E	3/10/2011 11:22:25 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-002  
**ClientSample ID:** P84665W  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 2:30:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	3/3/2011 2:48:42 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	3/3/2011 5:56:48 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	3/3/2011 5:56:48 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	3/3/2011 2:48:42 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	3/3/2011 5:56:48 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:48:42 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	3/3/2011 5:56:48 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	3/3/2011 2:48:42 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	3/3/2011 5:56:48 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/11/2011 9:33:10 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	3/3/2011 5:56:48 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:48:42 PM	DG
Selenium	0.010	mg/L		0.005	EPA 200.8	3/3/2011 5:56:48 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	3/3/2011 5:56:48 PM	MS
Uranium	0.0612	mg/L		0.0003	EPA 200.8	3/3/2011 5:56:48 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	3/3/2011 5:56:48 PM	MS
Zinc	0.06	mg/L		0.01	EPA 200.7	3/3/2011 2:48:42 PM	DG
<b>Metals - Total</b>							
Iron	0.09	mg/L		0.05	EPA 200.7	3/4/2011 3:30:16 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	3/4/2011 3:30:16 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	32.5	pCi/L		2	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Alpha Precision (±)	3.7	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta	11.0	pCi/L		4	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta Precision (±)	2.0	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Radium 226	0.5	pCi/L		0.2	SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/28/2011 4:52:10 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/28/2011 4:52:10 PM	SH

These results apply only to the samples tested.

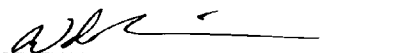
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-003  
**ClientSample ID:** SB WELL 01  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 3:00:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.24	s.u.			Field	3/1/2011 3:00:00 PM
Conductivity	1143	µmhos/cm			Field	3/1/2011 3:00:00 PM
Turbidity	0.47	NTU			Field	3/1/2011 3:00:00 PM
Temperature	7.4	°C			Field	3/1/2011 3:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	537	mg/L		5	SM 2320B	3/4/2011 12:41:55 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	579	mg/L		5	SM 2320B	3/4/2011 12:41:55 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	38	mg/L		5	SM 2320B	3/4/2011 12:41:55 AM AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	3/4/2011 12:41:55 AM AMB
Chloride	1	mg/L		1	EPA 300.0	3/3/2011 8:44:00 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	3/9/2011 11:57:00 AM AS
Sulfate	92	mg/L		1	EPA 300.0	3/3/2011 8:44:00 PM KO
Calcium	2	mg/L		1	EPA 200.7	3/3/2011 2:51:07 PM DG
Magnesium	ND	mg/L		1	EPA 200.7	3/3/2011 2:51:07 PM DG
Potassium	3	mg/L		1	EPA 200.7	3/3/2011 2:51:07 PM DG
Sodium	307	mg/L		1	EPA 200.7	3/3/2011 2:51:07 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	3/11/2011 11:23:00 AM AS
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	3/4/2011 12:41:55 AM AMB
Electrical Conductivity	1120	µmhos/cm		5	SM 2510B	3/4/2011 12:41:55 AM AMB
Total Dissolved Solids (180)	770	mg/L		10	SM 2540	3/7/2011 3:05:00 PM JF
<b>Data Quality</b>						
Cation Sum	13.56	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Anion Sum	12.69	meq/L		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Cation-Anion Balance (± 5%)	3.28	%		0.01	SM 1030E	3/10/2011 11:22:25 AM KO
Solids, Total Dissolved (Calc)	730	mg/L		10	SM 1030E	3/10/2011 11:22:25 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 3/31/2011  
**Report ID:** S1103071001

**ProjectName:** ROSS ISR  
**Lab ID:** S1103071-003  
**ClientSample ID:** SB WELL 01  
**COC:** 137092

**WorkOrder:** S1103071  
**CollectionDate:** 3/1/2011 3:00:00 PM  
**DateReceived:** 3/2/2011 4:36:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	3/3/2011 2:51:07 PM	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	3/3/2011 6:00:23 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	3/3/2011 6:00:23 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	3/3/2011 2:51:07 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	3/3/2011 6:00:23 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:51:07 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	3/3/2011 6:00:23 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	3/3/2011 2:51:07 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:00:23 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/11/2011 9:38:21 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:00:23 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:51:07 PM	DG
Selenium	0.010	mg/L		0.005	EPA 200.8	3/3/2011 6:00:23 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	3/3/2011 6:00:23 PM	MS
Uranium	0.0014	mg/L		0.0003	EPA 200.8	3/3/2011 6:00:23 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	3/3/2011 6:00:23 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	3/3/2011 2:51:07 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	3/4/2011 3:39:32 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	3/4/2011 3:39:32 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	3/20/2011 9:23:11 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	3/20/2011 9:23:11 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	3/10/2011 3:58:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/28/2011 4:52:10 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/28/2011 4:52:10 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-001  
**ClientSample ID:** TW01  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 11:10:00 AM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.50	s.u.			Field	2/10/2011 11:10:00 AM
Conductivity	1794	µmhos/cm			Field	2/10/2011 11:10:00 AM
Turbidity	0.68	NTU			Field	2/10/2011 11:10:00 AM
Temperature	10.8	°C			Field	2/10/2011 11:10:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	687	mg/L		5	SM 2320B	2/11/2011 3:26:20 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	823	mg/L		5	SM 2320B	2/11/2011 3:26:20 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	8	mg/L		5	SM 2320B	2/11/2011 3:26:20 PM AMB
Chloride	5	mg/L		1	EPA 300.0	2/11/2011 6:47:00 PM KO
Fluoride	1.2	mg/L		0.1	SM 4500FC	2/14/2011 10:46:53 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/21/2011 1:12:00 PM AS
Sulfate	377	mg/L		1	EPA 300.0	2/11/2011 6:47:00 PM KO
Calcium	9	mg/L		1	EPA 200.7	2/11/2011 2:09:00 PM DG
Magnesium	4	mg/L		1	EPA 200.7	2/11/2011 2:09:00 PM DG
Potassium	8	mg/L		1	EPA 200.7	2/11/2011 2:09:00 PM DG
Sodium	507	mg/L		1	EPA 200.7	2/11/2011 2:09:00 PM DG
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	2/11/2011 3:26:20 PM AMB
Electrical Conductivity	1910	µmhos/cm		5	SM 2510B	2/11/2011 3:26:20 PM AMB
Total Dissolved Solids (180)	1440	mg/L		10	SM 2540	2/11/2011 3:30:00 PM JF
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	2/16/2011 12:39:00 PM AS
<b>Data Quality</b>						
Cation Sum	23.01	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Anion Sum	21.79	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Cation-Anion Balance	2.72	%		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Solids, Total Dissolved (Calc)	1320	mg/L		10	SM 1030E	2/23/2011 1:28:02 PM WN
Calculated TDS/TDS Ratio	1.09			0.01	Calculation	2/25/2011 10:23:00 AM WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-001  
**ClientSample ID:** TW01  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 11:10:00 AM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/11/2011 2:09:00 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:02:17 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/11/2011 2:02:17 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	2/11/2011 2:09:00 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/11/2011 2:02:17 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:09:00 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/11/2011 2:02:17 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/11/2011 2:09:00 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:02:17 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/15/2011 11:06:12 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:02:17 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:09:00 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:02:17 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/11/2011 2:02:17 PM	MS
Uranium	ND	mg/L		0.001	EPA 200.8	2/11/2011 2:02:17 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:02:17 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:09:00 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	2/14/2011 4:51:06 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	2/14/2011 4:51:06 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Alpha Precision (±)	ND	pCi/L		4	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta	ND	pCi/L		7	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta Precision (±)	ND	pCi/L		7	SM 7110B	2/18/2011 10:06:00 AM	SH
Radium 228	2.5	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 228 Precision (±)	2.2	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH
Radium 226 Precision (±)	ND	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH

These results apply only to the samples tested.

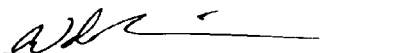
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-004  
**ClientSample ID:** TW02  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 1:00:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.47	s.u.			Field	2/10/2011 1:00:00 PM
Conductivity	1963	µmhos/cm			Field	2/10/2011 1:00:00 PM
Turbidity	0.88	NTU			Field	2/10/2011 1:00:00 PM
Temperature	7.0	°C			Field	2/10/2011 1:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	631	mg/L		5	SM 2320B	2/11/2011 3:58:47 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	769	mg/L		5	SM 2320B	2/11/2011 3:58:47 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	2/11/2011 3:58:47 PM AMB
Chloride	10	mg/L		1	EPA 300.0	2/11/2011 7:21:00 PM KO
Fluoride	0.5	mg/L		0.1	SM 4500FC	2/14/2011 10:56:27 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/21/2011 1:21:00 PM AS
Sulfate	506	mg/L		1	EPA 300.0	2/11/2011 7:21:00 PM KO
Calcium	26	mg/L		1	EPA 200.7	2/11/2011 2:22:51 PM DG
Magnesium	11	mg/L		1	EPA 200.7	2/11/2011 2:22:51 PM DG
Potassium	14	mg/L		1	EPA 200.7	2/11/2011 2:22:51 PM DG
Sodium	519	mg/L		1	EPA 200.7	2/11/2011 2:22:51 PM DG
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	2/11/2011 3:58:47 PM AMB
Electrical Conductivity	2010	µmhos/cm		5	SM 2510B	2/11/2011 3:58:47 PM AMB
Total Dissolved Solids (180)	1580	mg/L		10	SM 2540	2/11/2011 3:50:00 PM JF
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	2/16/2011 12:48:00 PM AS
<b>Data Quality</b>						
Cation Sum	25.15	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Anion Sum	23.46	meq/L		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Cation-Anion Balance	3.48	%		0.01	SM 1030E	2/23/2011 1:28:02 PM WN
Solids, Total Dissolved (Calc)	1460	mg/L		10	SM 1030E	2/23/2011 1:28:02 PM WN
Calculated TDS/TDS Ratio	1.08			0.01	Calculation	2/25/2011 10:23:00 AM WN

## These results apply only to the samples tested.

## RL - Reporting Limit

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 2/23/2011  
**Report ID:** S1102137001

**ProjectName:** Ross ISR  
**Lab ID:** S1102137-004  
**ClientSample ID:** TW02  
**COC:** 137099

**WorkOrder:** S1102137  
**CollectionDate:** 2/10/2011 1:00:00 PM  
**DateReceived:** 2/11/2011 8:35:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/11/2011 2:22:51 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:27:21 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/11/2011 2:27:21 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	2/11/2011 2:22:51 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/11/2011 2:27:21 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:22:51 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/11/2011 2:27:21 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/11/2011 2:22:51 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:27:21 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	2/15/2011 11:11:42 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:27:21 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:22:51 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/11/2011 2:27:21 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/11/2011 2:27:21 PM	MS
Uranium	ND	mg/L		0.001	EPA 200.8	2/11/2011 2:27:21 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/11/2011 2:27:21 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/11/2011 2:22:51 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	2/14/2011 4:58:09 PM	DG
Manganese	0.02	mg/L		0.02	EPA 200.7	2/14/2011 4:58:09 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		5	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Alpha Precision (±)	ND	pCi/L		5	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta	ND	pCi/L		8	SM 7110B	2/18/2011 10:06:00 AM	SH
Gross Beta Precision (±)	ND	pCi/L		8	SM 7110B	2/18/2011 10:06:00 AM	SH
Radium 228	1.3	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 228 Precision (±)	2.2	pCi/L		1	Ra-05	2/22/2011 12:01:00 AM	SH
Radium 226	0.4	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L		0.2	SM 7500-Ra B	2/21/2011 12:34:00 PM	SH

## These results apply only to the samples tested.

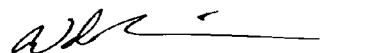
## RL - Reporting Limit

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Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** 19xx18 **Date:** 5-6-11 **Time:** 0830

**Landowner**

**Name:** Merit Energy

**Address** \_\_\_\_\_

**Phone#** \_\_\_\_\_

**Legal Location**

**Qtr/Qtr** SESW

**SEC** 18

**TWN** 53

**RNG** 67

**Industrial** ✓  
**Stock**

**Picture #(s)** \_\_\_\_\_

**Domestic** \_\_\_\_\_

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** PL7747W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 8.88

**Cond.** 2.93ms

**Temp. °C** 11.6

**Turbidity (ntu)** 0.49

**D.O. (mg/L)** 3.65/35.5

**Water Level (ft):** \_\_\_\_\_

**% Combustible Gas:** \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** \_\_\_\_\_

**Comments:** Water Clear - no odor - Fizzy -  
7 bottles - RG 4.14

COC # 136436

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 22X-19 Date: 5-6-11 Time: 1030

Landowner

Name: Merit 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 9.09

Cond. 2.66 mS

Temp. °C 11.6

Turbidity (ntu) 1.85

D.O. (mg/L) 2.61 / 24.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear, f1224, and no odor.  
7 bottles - RG 4.14

COC # 136436



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: CSWELL01 Date: 5-16-11 Time: 1430

**Landowner**

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW/NW

SEC 20

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P132537W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.29

Cond. 4.09 mS

Temp. °C 9.6

Turbidity (ntu) 0.25

D.O. (mg/L) 1.49/13.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor

7 sample bottles - RG 4.14

COC# 136437

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** CS WELL 03 **Date:** 5-16-11 **Time:** 12.00

**Landowner**

**Name:** Strong/Otwell

**Address** \_\_\_\_\_

**Phone#** \_\_\_\_\_

**Legal Location**

**Qtr/Qtr** NENE

**SEC** 30

**TWN** 53

**RNG** 67

**Picture #(s)** \_\_\_\_\_

**Stock** ☒

**Domestic** ☒

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** P619W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 8.39

**Cond.** 615  $\mu$ S

**Temp. °C** 10.4

**Turbidity (ntu)** 39.2

**D.O. (mg/L)** 1.20 / 11.0

**Water Level (ft):** \_\_\_\_\_

**% Combustible Gas:** —

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** 50°F / windy

**Comments:** Water turbid - no odor

7 - Sample bottles - R6 4.14

COC# 136437

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

Name: DW WELL 01 Date: 5-17-11 Time: 0900

**Landowner**

Name: Wood

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNW

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 8.87

Cond. 3.19 mS

Temp. °C 9.4

Turbidity (ntu) 5.22

D.O. (mg/L) 1.16/10.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly turbid - no odor  
7 sample bottles - RG 4.14

COC # 136437

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELL03 Date: 6-29-11 Time: 1240

**Landowner**

Name: Burger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 5

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7324P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.09

Cond. 1740  $\mu$ S

Temp. °C 11.1

Turbidity (ntu) 26.1

D.O. (mg/L) 0.64 / 6.0%

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly turbid - no odor -  
7 sample bottles - RG 4.14

CDC # 137104

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HB WELLO4 Date: 6-29-11 Time: 1200

**Landowner**

Name: Burger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NE NW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7326P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.74

Cond. 1634

Temp. °C 10.6

Turbidity (ntu) 7.15

D.O. (mg/L) 0.80 / 7.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor - 7  
sample bottles - 4.14

COC# 137104

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HB WELL 05 Date: 6-29 Time: 1430

**Landowner**

Name: Burger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7430P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.01

Cond. 1536  $\mu$ S

Temp. °C 10.9

Turbidity (ntu) 187

D.O. (mg/L) 4.17 / 39.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water turbid (Rust Colored) - no  
odor - 7 sample bottles - RG 4.14

COC# 137104

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** P17177W **Date:** 5-17-11 **Time:** 1240

**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:** \_\_\_\_\_

**Permit No.** P17177W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 7.85

**Cond.** 893  $\mu$ S

**Temp. °C** 8.5

**Turbidity (ntu)** 0.54

**D.O. (mg/L)** 3.49 / 30.4

**Water Level (ft):** \_\_\_\_\_

**% Combustible Gas:** \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** \_\_\_\_\_

**Comments:** Stock tank well by Creek East of  
Dallas and Anna's house - water clear - no  
odor - 7 sample bottles - RG 4.14

COC# 136439

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P 22 582 P Date: 6-29-11 Time: 0930

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 19

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P22582P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.31

Cond. 851

Temp. °C 10.6

Turbidity (ntu) 2.89

D.O. (mg/L) 0.92/8.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7  
sample bottles - RG 4.14

COC# 137104



**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** P42868W **Date:** 6-7-11 **Time:** 1100

**Landowner**

**Name:** HAHN

**Address** \_\_\_\_\_

**Phone#** \_\_\_\_\_

**Legal Location**

**Qtr/Qtr** NWSE

**SEC** 14

**TWN** 53

**RNG** 68

**Picture #(s)** \_\_\_\_\_

**Stock** ✓

**Domestic** ✓

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** P42868W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 9.08

**Cond.** 1295  $\mu$ S

**Temp. °C** 12.9

**Turbidity (ntu)** 2.83

**D.O. (mg/L)** 1.48 / 14.0

**Water Level (ft):** \_\_\_\_\_

**% Combustible Gas:** \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** \_\_\_\_\_

**Comments:** Water clear - no odor - 7 sample bottles - RG 4.14

COC # 136441

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** P50113W **Date:** 5-17-11 **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:** \_\_\_\_\_

**Permit No.** P50113W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 7.94

**Cond.** 1482  $\mu$ S

**Temp. °C** 7.6

**Turbidity (ntu)** 1.43

**D.O. (mg/L)** 1.35 / 11.5

**Water Level (ft):** \_\_\_\_\_

**% Combustible Gas:** \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** \_\_\_\_\_

**Comments:** Stock tank by creek next to main facility - water clear - no odor - 7 sample bottles - R16 4.14

COC# 136439

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P50883W Date: 6-29-11 Time: 1110

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWNE

SEC 24

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50883W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.17

Cond. 719  $\mu$ S

Temp. °C 12.6

Turbidity (ntu) 105

D.O. (mg/L) 4.81 / 46.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water turbid - no odor - 7  
sample bottles - RG 4.14

COC# 137104

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61006W Date: 6-7-11 Time: 1150

**Landowner**

Name: HANN

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61006W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.43

Cond. 1042 uS

Temp. °C 10.8

Turbidity (ntu) 3.03

D.O. (mg/L) 1.09 / 10.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor - 7 sample bottles - RG 4.14

COC # 136441

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61007W Date: 6-7-11 Time: 1230

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61007W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 9.01

Cond. 1135

Temp. °C 11.4

Turbidity (ntu) 6.72

D.O. (mg/L) 2.37 / 22.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles - R6 4.14

COC # 136441

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P71108W-RAW Date: 5-17-11 Time: 1430

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SENE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P71108W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.87

Cond. 1788  $\mu$ S

Temp. °C 9.2

Turbidity (ntu) 0.37

D.O. (mg/L) 0.88 / 7.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Dallas and Anna's house well -  
Water Clear - no odor - 7 sample  
bottles - RG 4.14

COC # 136439

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P84665W Date: 5-17-11 Time: 1020

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW/NW

SEC 2

TWN 33

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P84665W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.87

Cond. 1038  $\mu$ S

Temp. °C 7.5

Turbidity (ntu) 0.81

D.O. (mg/L) 2.60 / 20.6

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Windmill Well - Water clear -  
No odor - 7 sample bottles - RG 4.14

COC# 136437

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

Name: SBWELLO1 Date: 5-<sup>17</sup>~~16~~-11 Time: 1130

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

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 9.18

Cond. 1162  $\mu$ S

Temp. °C 9.9

Turbidity (ntu) 0.53

D.O. (mg/L) 0.84 / 7.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Main facility well - water clear - no  
odor - 7 sample bottles - RG 4.14

COC# 136437



**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** SBWELLOR **Date:** 5-17-11 **Time:** 1330

**Landowner**

**Name:** Burch

**Address** \_\_\_\_\_

**Phone#** \_\_\_\_\_

**Legal Location**

**Qtr/Qtr** NESE

**SEC** 1

**TWN** 53

**RNG** 68

**Picture #(s)** \_\_\_\_\_

**Stock** ☒

**Domestic** \_\_\_\_\_

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** —

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 8.25

**Cond.** 1011  $\mu$ S

**Temp. °C** 9.4

**Turbidity (ntu)** 1.15

**D.O. (mg/L)** 3.05 / 27.6

**Water Level (ft):** \_\_\_\_\_

**% Combustible Gas:** \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** \_\_\_\_\_

**Comments:** Stock tank well by reservoir -  
water clear - no odor. 7 sample  
bottles.

COC # 136439

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TWWELLO3 Date: 5-5-11 Time: 1100

Landowner

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SESE

SEC 12

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. R192896W

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH 9.12

Cond. 1467

Temp. °C 10.6

Turbidity (ntu) 0.91

D.O. (mg/L) 1.23 / 11.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 bottle  
sample. RG 4.14

COC # 136435

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TW01 Date: 5-5-11 Time: 0930

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.56

Cond. 1938 uS

Temp. °C 9.4

Turbidity (ntu) 0.69

D.O. (mg/L) 1.41 / 12.6

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: TJ's house well - collected sample  
from outside house facet - water clear -  
no odor - 7 bottle - 4.14

COC # 136435

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

Name: TWO 2 Date: 5-4-11 Time: 1530

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESE

SEC 8

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P10366600

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.45

Cond. 2.77 mS

Temp. °C 7.5

Turbidity (ntu) 0.36

D.O. (mg/L) 2.00 / 16.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: G.L.8 (DEQ), T. metal sup, Uran sup, and  
4.14, Water clear-no ramp odor - 7 bottle

COC # 136433



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105116001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105116-001  
**ClientSample ID:** 19XX18  
**COC:** 136436

**WorkOrder:** S1105116  
**CollectionDate:** 5/6/2011 8:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.88	s.u.			Field	5/6/2011 8:30:00 AM
Conductivity	2930	µmhos/cm			Field	5/6/2011 8:30:00 AM
Dissolved Oxygen	3.65	mg/L			Field	5/6/2011 8:30:00 AM
Dissolved Oxygen (pct)	35.5	%			Field	5/6/2011 8:30:00 AM
Turbidity	0.49	NTU			Field	5/6/2011 8:30:00 AM
Temperature	11.6	°C			Field	5/6/2011 8:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	536	mg/L		5	SM 2320B	5/9/2011 5:13:12 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	607	mg/L		5	SM 2320B	5/9/2011 5:13:12 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	23	mg/L		5	SM 2320B	5/9/2011 5:13:12 PM AMB
Chloride	8	mg/L		1	EPA 300.0	5/10/2011 6:42:00 PM LK
Fluoride	0.4	mg/L		0.1	SM 4500FC	5/9/2011 5:13:12 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	5/16/2011 1:16:00 PM LJK
Sulfate	680	mg/L		1	EPA 300.0	5/10/2011 6:42:00 PM LK
Calcium	8	mg/L		1	EPA 200.7	5/9/2011 8:07:42 PM DG
Magnesium	3	mg/L		1	EPA 200.7	5/9/2011 8:07:42 PM DG
Potassium	4	mg/L		1	EPA 200.7	5/9/2011 8:07:42 PM DG
Sodium	614	mg/L		1	EPA 200.7	5/9/2011 8:07:42 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 11:57:00 AM MEL
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	5/9/2011 5:13:12 PM AMB
Electrical Conductivity	2010	µmhos/cm		5	SM 2510B	5/9/2011 5:13:12 PM AMB
Total Dissolved Solids (180)	1720	mg/L		10	SM 2540	5/10/2011 6:15:00 PM JF
<b>Data Quality</b>						
Cation Sum	27.43	meq/L		0.01	SM 1030E	5/18/2011 10:47:20 AM KO
Anion Sum	25.16	meq/L		0.01	SM 1030E	5/18/2011 10:47:20 AM KO
Cation-Anion Balance (± 5%)	4.30	%		0.01	SM 1030E	5/18/2011 10:47:20 AM KO
Solids, Total Dissolved (Calc)	1640	mg/L		10	SM 1030E	5/18/2011 10:47:20 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105116001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105116-001  
**ClientSample ID:** 19XX18  
**COC:** 136436

**WorkOrder:** S1105116  
**CollectionDate:** 5/6/2011 8:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/9/2011 8:07:42 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:26:09 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/9/2011 3:26:09 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	5/9/2011 8:07:42 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/9/2011 3:26:09 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:07:42 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/9/2011 3:26:09 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/9/2011 8:07:42 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:26:09 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/17/2011 10:54:38 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:26:09 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:07:42 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:26:09 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	5/9/2011 3:26:09 PM	MS
Uranium	0.0779	mg/L		0.0003	EPA 200.8	5/9/2011 3:26:09 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:26:09 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:07:42 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 8:30:48 PM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	5/9/2011 8:12:01 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	5/9/2011 8:12:01 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105116001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105116-001  
**ClientSample ID:** 19XX18  
**COC:** 136436

**WorkOrder:** S1105116  
**CollectionDate:** 5/6/2011 8:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	190	pCi/L		3	SM 7110B	5/23/2011	SH
Gross Alpha Precision (±)	9.8	pCi/L			SM 7110B	5/23/2011	SH
Gross Beta	57.9	pCi/L		7	SM 7110B	5/23/2011	SH
Gross Beta Precision (±)	5.1	pCi/L			SM 7110B	5/23/2011	SH
Lead 210	3.9	pCi/L		1	OTW01	5/20/2011 11:03:40 AM	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	5/20/2011 11:03:40 AM	SH
Polonium 210	4.0	pCi/L		1	OTW01	5/19/2011 4:01:33 PM	SH
Polonium 210 Precision (±)	0.9	pCi/L			OTW01	5/19/2011 4:01:33 PM	SH
Radium 226	37.1	pCi/L		0.2	SM 7500-Ra B	5/25/2011 9:54:14 AM	SH
Radium 226 Precision (±)	0.7	pCi/L			SM 7500-Ra B	5/25/2011 9:54:14 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	5/24/2011 1:52:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	5/24/2011 1:52:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/3/2011 4:13:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/3/2011 4:13:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.7	pCi/L		1	OTW01	5/31/2011 11:11:53 AM	SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	5/31/2011 11:11:53 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	5/27/2011 12:54:27 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/27/2011 12:54:27 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	5/18/2011 4:17:32 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	5/18/2011 4:17:32 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/6/2011 12:18:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/6/2011 12:18:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105116001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105116-003  
**ClientSample ID:** 22X-19  
**COC:** 136436

**WorkOrder:** S1105116  
**CollectionDate:** 5/6/2011 10:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.09	s.u.			Field	5/6/2011 10:30:00 AM
Conductivity	2660	µmhos/cm			Field	5/6/2011 10:30:00 AM
Dissolved Oxygen	2.61	mg/L			Field	5/6/2011 10:30:00 AM
Dissolved Oxygen (pct)	24.3	%			Field	5/6/2011 10:30:00 AM
Turbidity	1.85	NTU			Field	5/6/2011 10:30:00 AM
Temperature	11.6	°C			Field	5/6/2011 10:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	475	mg/L		5	SM 2320B	5/9/2011 5:34:41 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	523	mg/L		5	SM 2320B	5/9/2011 5:34:41 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	28	mg/L		5	SM 2320B	5/9/2011 5:34:41 PM AMB
Chloride	13	mg/L		1	EPA 300.0	5/10/2011 7:09:00 PM LK
Fluoride	0.5	mg/L		0.1	SM 4500FC	5/9/2011 5:34:41 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/16/2011 1:18:00 PM LJK
Sulfate	546	mg/L		1	EPA 300.0	5/10/2011 7:09:00 PM LK
Calcium	6	mg/L		1	EPA 200.7	5/17/2011 5:06:23 PM DG
Magnesium	2	mg/L		1	EPA 200.7	5/17/2011 5:06:23 PM DG
Potassium	4	mg/L		1	EPA 200.7	5/17/2011 5:06:23 PM DG
Sodium	522	mg/L		1	EPA 200.7	5/17/2011 5:06:23 PM DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	5/19/2011 11:59:00 AM MEL
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	5/9/2011 5:34:41 PM AMB
Electrical Conductivity	1820	µmhos/cm		5	SM 2510B	5/9/2011 5:34:41 PM AMB
Total Dissolved Solids (180)	1450	mg/L		10	SM 2540	5/10/2011 6:25:00 PM JF
<b>Data Quality</b>						
Cation Sum	23.25	meq/L		0.01	SM 1030E	5/18/2011 10:47:20 AM KO
Anion Sum	21.25	meq/L		0.01	SM 1030E	5/18/2011 10:47:20 AM KO
Cation-Anion Balance (± 5%)	4.47	%		0.01	SM 1030E	5/18/2011 10:47:20 AM KO
Solids, Total Dissolved (Calc)	1380	mg/L		10	SM 1030E	5/18/2011 10:47:20 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105116001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105116-003  
**ClientSample ID:** 22X-19  
**COC:** 136436

**WorkOrder:** S1105116  
**CollectionDate:** 5/6/2011 10:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/9/2011 8:24:22 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:34:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/9/2011 3:34:00 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	5/9/2011 8:24:22 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/9/2011 3:34:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:24:22 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/9/2011 3:34:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/9/2011 8:24:22 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:34:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/17/2011 11:03:26 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:34:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:24:22 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:34:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	5/9/2011 3:34:00 PM	MS
Uranium	0.0200	mg/L		0.0003	EPA 200.8	5/9/2011 3:34:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:34:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:24:22 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 8:58:22 PM	MS
<b>Metals - Total</b>							
Iron	0.05	mg/L		0.05	EPA 200.7	5/9/2011 8:16:50 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	5/9/2011 8:16:50 PM	DG

These results apply only to the samples tested.

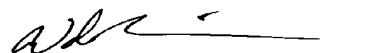
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105116001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105116-003  
**ClientSample ID:** 22X-19  
**COC:** 136436

**WorkOrder:** S1105116  
**CollectionDate:** 5/6/2011 10:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	40.3	pCi/L		3	SM 7110B	5/23/2011 SH
Gross Alpha Precision (±)	4.8	pCi/L			SM 7110B	5/23/2011 SH
Gross Beta	9.4	pCi/L		7	SM 7110B	5/23/2011 SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	5/23/2011 SH
Lead 210	1.1	pCi/L		1	OTW01	5/20/2011 11:03:40 AM SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	5/20/2011 11:03:40 AM SH
Polonium 210	ND	pCi/L		1	OTW01	5/19/2011 4:01:33 PM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/19/2011 4:01:33 PM SH
Radium 226	3.4	pCi/L		0.2	SM 7500-Ra B	5/25/2011 9:54:14 AM SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500-Ra B	5/25/2011 9:54:14 AM SH
Radium 228	ND	pCi/L		1	Ra-05	5/24/2011 1:52:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	5/24/2011 1:52:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/3/2011 4:13:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/3/2011 4:13:00 PM SH
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	5/31/2011 7:23:34 AM SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	5/31/2011 7:23:34 AM SH
Polonium 210	ND	pCi/L		1	OTW01	5/27/2011 4:22:46 PM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/27/2011 4:22:46 PM SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	5/18/2011 4:17:32 PM SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	5/18/2011 4:17:32 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/6/2011 12:18:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/6/2011 12:18:00 PM SH

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-002  
**ClientSample ID:** CSWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/16/2011 2:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.29	s.u.			Field	5/16/2011 2:30:00 PM
Conductivity	4090	µmhos/cm			Field	5/16/2011 2:30:00 PM
Dissolved Oxygen	1.49	mg/L			Field	5/16/2011 2:30:00 PM
Dissolved Oxygen (pct)	13.5	%			Field	5/16/2011 2:30:00 PM
Turbidity	0.25	NTU			Field	5/16/2011 2:30:00 PM
Temperature	9.6	°C			Field	5/16/2011 2:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	673	mg/L		5	SM 2320B	5/18/2011 4:59:23 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	821	mg/L		5	SM 2320B	5/18/2011 4:59:23 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	5/18/2011 4:59:23 PM AMB
Chloride	14	mg/L		1	EPA 300.0	5/19/2011 1:56:00 PM KO
Fluoride	0.4	mg/L		0.1	SM 4500FC	5/18/2011 4:59:23 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	1.2	mg/L		0.1	EPA 353.2	5/24/2011 2:29:00 PM MEL
Sulfate	1110	mg/L		1	EPA 300.0	5/19/2011 1:56:00 PM KO
Calcium	62	mg/L		1	EPA 200.7	5/18/2011 9:11:34 PM DG
Magnesium	50	mg/L		1	EPA 200.7	5/18/2011 9:11:34 PM DG
Potassium	16	mg/L		1	EPA 200.7	5/18/2011 9:11:34 PM DG
Sodium	700	mg/L		1	EPA 200.7	5/18/2011 9:11:34 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 4:45:00 PM LJK
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	5/18/2011 4:59:23 PM AMB
Electrical Conductivity	2600	µmhos/cm		5	SM 2510B	5/18/2011 4:59:23 PM AMB
Total Dissolved Solids (180)	2520	mg/L		10	SM 2540	5/18/2011 1:00:00 PM JF
<b>Data Quality</b>						
Cation Sum	38.04	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Anion Sum	37.10	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Cation-Anion Balance (± 5%)	1.24	%		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Solids, Total Dissolved (Calc)	2360	mg/L		10	SM 1030E	6/21/2011 12:21:22 PM WN

These results apply only to the samples tested.

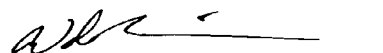
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-002  
**ClientSample ID:** CSWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/16/2011 2:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:11:34 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:59:42 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 12:59:42 PM MS
Boron	0.5	mg/L		0.1	EPA 200.7	5/18/2011 9:11:34 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 12:59:42 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:11:34 PM DG
Copper	0.01	mg/L		0.01	EPA 200.8	5/18/2011 12:59:42 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	5/18/2011 9:11:34 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:59:42 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/20/2011 9:10:57 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:59:42 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:11:34 PM DG
Selenium	0.019	mg/L		0.005	EPA 200.8	5/18/2011 12:59:42 PM MS
Silver	0.005	mg/L		0.003	EPA 200.8	5/18/2011 12:59:42 PM MS
Uranium	0.0317	mg/L		0.0003	EPA 200.8	5/18/2011 12:59:42 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:59:42 PM MS
Zinc	0.01	mg/L		0.01	EPA 200.7	5/18/2011 9:11:34 PM DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 6:20:56 PM MS
<b>Metals - Total</b>						
Iron	0.07	mg/L		0.05	EPA 200.7	5/19/2011 6:01:42 PM DG
Manganese	0.04	mg/L		0.02	EPA 200.7	5/19/2011 6:01:42 PM DG

## These results apply only to the samples tested.

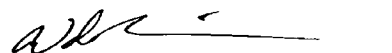
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-002  
**ClientSample ID:** CSWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/16/2011 2:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	23.9	pCi/L		5	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	4.6	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	18.3	pCi/L		7	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	0.8	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/20/2011 2:21:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/20/2011 2:21:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:00:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:00:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/9/2011 2:20:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/9/2011 2:20:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-001  
**ClientSample ID:** CSWELL 03  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/16/2011 12:00:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.39	s.u.			Field	5/16/2011 12:00:00 PM
Conductivity	615	µmhos/cm			Field	5/16/2011 12:00:00 PM
Dissolved Oxygen	1.20	mg/L			Field	5/16/2011 12:00:00 PM
Dissolved Oxygen (pct)	11.0	%			Field	5/16/2011 12:00:00 PM
Turbidity	39.2	NTU			Field	5/16/2011 12:00:00 PM
Temperature	10.4	°C			Field	5/16/2011 12:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	304	mg/L		5	SM 2320B	5/18/2011 4:48:28 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	368	mg/L		5	SM 2320B	5/18/2011 4:48:28 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	5/18/2011 4:48:28 PM AMB
Chloride	6	mg/L		1	EPA 300.0	5/19/2011 1:44:00 PM KO
Fluoride	0.1	mg/L		0.1	SM 4500FC	5/18/2011 4:48:28 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/19/2011 5:56:00 PM LJK
Sulfate	32	mg/L		1	EPA 300.0	5/19/2011 1:44:00 PM KO
Calcium	30	mg/L		1	EPA 200.7	5/18/2011 9:09:12 PM DG
Magnesium	17	mg/L		1	EPA 200.7	5/18/2011 9:09:12 PM DG
Potassium	9	mg/L		1	EPA 200.7	5/18/2011 9:09:12 PM DG
Sodium	86	mg/L		1	EPA 200.7	5/18/2011 9:09:12 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 4:44:00 PM LJK
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	5/18/2011 4:48:28 PM AMB
Electrical Conductivity	542	µmhos/cm		5	SM 2510B	5/18/2011 4:48:28 PM AMB
Total Dissolved Solids (180)	370	mg/L		10	SM 2540	5/18/2011 12:55:00 PM JF
<b>Data Quality</b>						
Cation Sum	6.82	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Anion Sum	6.90	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Cation-Anion Balance (± 5%)	0.56	%		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Solids, Total Dissolved (Calc)	360	mg/L		10	SM 1030E	6/21/2011 12:21:22 PM WN

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-001  
**ClientSample ID:** CSWELL 03  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/16/2011 12:00:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:09:12 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:47:51 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 12:47:51 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:09:12 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 12:47:51 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:09:12 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 12:47:51 PM	MS
Iron	0.44	mg/L		0.05	EPA 200.7	5/18/2011 9:09:12 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:47:51 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/20/2011 9:09:11 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:47:51 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:09:12 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:47:51 PM	MS
Silver	0.005	mg/L		0.003	EPA 200.8	5/18/2011 12:47:51 PM	MS
Uranium	0.0017	mg/L		0.0003	EPA 200.8	5/18/2011 12:47:51 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:47:51 PM	MS
Zinc	0.01	mg/L		0.01	EPA 200.7	5/18/2011 9:09:12 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 6:05:12 PM	MS
<b>Metals - Total</b>							
Iron	5.19	mg/L		0.05	EPA 200.7	5/19/2011 5:59:22 PM	DG
Manganese	0.21	mg/L		0.02	EPA 200.7	5/19/2011 5:59:22 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-001  
**ClientSample ID:** CSWELL 03  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/16/2011 12:00:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.9	pCi/L		2	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	0.8	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	6.7	pCi/L		3	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	1.1	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/13/2011 3:28:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/13/2011 3:28:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:00:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:00:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/8/2011 1:17:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/8/2011 1:17:00 PM	SH

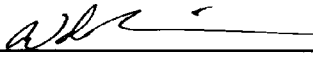
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-003  
**ClientSample ID:** DWWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 9:00:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.87	s.u.			Field	5/17/2011 9:00:00 AM
Conductivity	3190	µmhos/cm			Field	5/17/2011 9:00:00 AM
Dissolved Oxygen	1.16	mg/L			Field	5/17/2011 9:00:00 AM
Dissolved Oxygen (pct)	10.3	%			Field	5/17/2011 9:00:00 AM
Turbidity	5.22	NTU			Field	5/17/2011 9:00:00 AM
Temperature	9.4	°C			Field	5/17/2011 9:00:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	589	mg/L		5	SM 2320B	5/18/2011 5:09:19 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	699	mg/L		5	SM 2320B	5/18/2011 5:09:19 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	9	mg/L		5	SM 2320B	5/18/2011 5:09:19 PM AMB
Chloride	8	mg/L		1	EPA 300.0	5/19/2011 3:11:00 PM KO
Fluoride	0.5	mg/L		0.1	SM 4500FC	5/18/2011 5:09:19 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/24/2011 2:30:00 PM MEL
Sulfate	662	mg/L		1	EPA 300.0	5/19/2011 3:11:00 PM KO
Calcium	15	mg/L		1	EPA 200.7	5/18/2011 9:13:57 PM DG
Magnesium	6	mg/L		1	EPA 200.7	5/18/2011 9:13:57 PM DG
Potassium	12	mg/L		1	EPA 200.7	5/18/2011 9:13:57 PM DG
Sodium	570	mg/L		1	EPA 200.7	5/18/2011 9:13:57 PM DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	5/19/2011 4:46:00 PM LJK
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	5/18/2011 5:09:19 PM AMB
Electrical Conductivity	2080	µmhos/cm		5	SM 2510B	5/18/2011 5:09:19 PM AMB
Total Dissolved Solids (180)	1780	mg/L		10	SM 2540	5/18/2011 1:10:00 PM JF
<b>Data Quality</b>						
Cation Sum	26.32	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Anion Sum	25.81	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Cation-Anion Balance (± 5%)	0.97	%		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Solids, Total Dissolved (Calc)	1630	mg/L		10	SM 1030E	6/21/2011 12:21:22 PM WN

These results apply only to the samples tested.

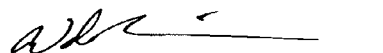
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-003  
**ClientSample ID:** DWWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 9:00:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:13:57 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 1:15:26 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 1:15:26 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	5/18/2011 9:13:57 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 1:15:26 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:13:57 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 1:15:26 PM	MS
Iron	0.48	mg/L		0.05	EPA 200.7	5/18/2011 9:13:57 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:15:26 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/20/2011 9:12:43 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:15:26 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:13:57 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/18/2011 1:15:26 PM	MS
Silver	0.004	mg/L		0.003	EPA 200.8	5/18/2011 1:15:26 PM	MS
Uranium	0.0009	mg/L		0.0003	EPA 200.8	5/18/2011 1:15:26 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:15:26 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:13:57 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 6:24:52 PM	MS
<b>Metals - Total</b>							
Iron	1.61	mg/L		0.05	EPA 200.7	5/19/2011 6:04:03 PM	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	5/19/2011 6:04:03 PM	DG

## These results apply only to the samples tested.

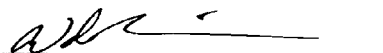
**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-003  
**ClientSample ID:** DWWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 9:00:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.3	pCi/L		3	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	1.9	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	7.0	pCi/L		7	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	1.0	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/20/2011 2:21:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/20/2011 2:21:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:01:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:01:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.4	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	6.7	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	1.1	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/9/2011 2:20:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/9/2011 2:20:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-005  
**ClientSample ID:** HBWELL03  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 12:40:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.09	s.u.			Field	6/29/2011 12:40:00 PM
Conductivity	1740	µmhos/cm			Field	6/29/2011 12:40:00 PM
Dissolved Oxygen	0.64	mg/L			Field	6/29/2011 12:40:00 PM
Dissolved Oxygen (pct)	6.0	%			Field	6/29/2011 12:40:00 PM
Turbidity	26.1	NTU			Field	6/29/2011 12:40:00 PM
Temperature	11.1	°C			Field	6/29/2011 12:40:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	493	mg/L		5	SM 2320B	7/7/2011 12:44:50 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	601	mg/L		5	SM 2320B	7/7/2011 12:44:50 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	7/7/2011 12:44:50 PM AMB
Chloride	20	mg/L		1	EPA 300.0	7/14/2011 3:54:00 PM ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	7/7/2011 12:44:50 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	7/11/2011 3:32:00 PM MEL
Sulfate	508	mg/L		1	EPA 300.0	7/14/2011 3:54:00 PM ARF
Calcium	83	mg/L		1	EPA 200.7	7/18/2011 6:10:45 PM DG
Magnesium	52	mg/L		1	EPA 200.7	7/18/2011 6:10:45 PM DG
Potassium	17	mg/L		1	EPA 200.7	7/18/2011 6:10:45 PM DG
Sodium	315	mg/L		1	EPA 200.7	7/18/2011 6:10:45 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	7/11/2011 5:58:00 PM MEL
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	7/7/2011 12:44:50 PM AMB
Electrical Conductivity	2030	µmhos/cm		5	SM 2510B	7/7/2011 12:44:50 PM AMB
Total Dissolved Solids (180)	1330	mg/L		10	SM 2540	7/11/2011 3:30:00 PM JF
<b>Data Quality</b>						
Cation Sum	22.53	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Anion Sum	21.02	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Cation-Anion Balance (± 5%)	3.46	%		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Solids, Total Dissolved (Calc)	1290	mg/L		10	SM 1030E	7/25/2011 9:29:54 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-005  
**ClientSample ID:** HBWELL03  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 12:40:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	7/5/2011 4:53:57 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:24:37 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	7/1/2011 10:24:37 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	7/5/2011 4:53:57 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	7/1/2011 10:24:37 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:53:57 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	7/1/2011 10:24:37 PM	MS
Iron	3.80	mg/L		0.05	EPA 200.7	7/5/2011 4:53:57 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:24:37 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	7/8/2011 10:29:36 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:24:37 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:53:57 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:24:37 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	7/1/2011 10:24:37 PM	MS
Uranium	0.0040	mg/L		0.0003	EPA 200.8	7/1/2011 10:24:37 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:24:37 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:53:57 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	7/11/2011 12:30:56 PM	MS
<b>Metals - Total</b>							
Iron	5.69	mg/L		0.05	EPA 200.7	7/6/2011 6:25:23 PM	RS
Manganese	0.23	mg/L		0.02	EPA 200.7	7/6/2011 6:25:23 PM	RS

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-005  
**ClientSample ID:** HBWELL03  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 12:40:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		5	SM 7110B	7/26/2011 7:48:00 PM SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	7/26/2011 7:48:00 PM SH
Gross Beta	16.0	pCi/L		8	SM 7110B	7/26/2011 7:48:00 PM SH
Gross Beta Precision (±)	4.7	pCi/L			SM 7110B	7/26/2011 7:48:00 PM SH
Lead 210	1.3	pCi/L		1	OTW01	7/26/2011 3:25:38 PM SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	7/26/2011 3:25:38 PM SH
Polonium 210	ND	pCi/L		1	OTW01	7/26/2011 12:36:45 PM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/26/2011 12:36:45 PM SH
Radium 226	0.5	pCi/L		0.2	SM 7500-Ra B	7/18/2011 6:00:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	7/18/2011 6:00:00 PM SH
Radium 228	1.1	pCi/L		1	Ra-05	8/5/2011 3:40:00 PM SH
Radium 228 Precision (±)	0.9	pCi/L			Ra-05	8/5/2011 3:40:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 1:13:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 1:13:00 PM SH
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	7/22/2011 8:58:10 AM SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	7/22/2011 8:58:10 AM SH
Polonium 210	ND	pCi/L		1	OTW01	7/21/2011 9:00:03 AM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/21/2011 9:00:03 AM SH
Radium 226	0.4	pCi/L		0.2	SM 7500-Ra B	7/21/2011 1:38:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	7/21/2011 1:38:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 5:33:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 5:33:00 PM SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-004  
**ClientSample ID:** HBWELL04  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 12:00:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.74	s.u.			Field	6/29/2011 12:00:00 PM
Conductivity	1634	µmhos/cm			Field	6/29/2011 12:00:00 PM
Dissolved Oxygen	0.80	mg/L			Field	6/29/2011 12:00:00 PM
Dissolved Oxygen (pct)	7.4	%			Field	6/29/2011 12:00:00 PM
Turbidity	7.15	NTU			Field	6/29/2011 12:00:00 PM
Temperature	10.6	°C			Field	6/29/2011 12:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	362	mg/L		5	SM 2320B	7/7/2011 12:33:32 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	442	mg/L		5	SM 2320B	7/7/2011 12:33:32 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	7/7/2011 12:33:32 PM AMB
Chloride	15	mg/L		1	EPA 300.0	7/14/2011 3:41:00 PM ARF
Fluoride	0.1	mg/L		0.1	SM 4500FC	7/7/2011 12:33:32 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	0.6	mg/L		0.1	EPA 353.2	7/11/2011 3:31:00 PM MEL
Sulfate	585	mg/L		1	EPA 300.0	7/14/2011 3:41:00 PM ARF
Calcium	208	mg/L		1	EPA 200.7	7/5/2011 4:51:32 PM DG
Magnesium	66	mg/L		1	EPA 200.7	7/5/2011 4:51:32 PM DG
Potassium	8	mg/L		1	EPA 200.7	7/5/2011 4:51:32 PM DG
Sodium	136	mg/L		1	EPA 200.7	7/5/2011 4:51:32 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	7/11/2011 5:57:00 PM MEL
<b>General Parameters</b>						
pH	7.8	s.u.		0.1	SM 4500 H B	7/7/2011 12:33:32 PM AMB
Electrical Conductivity	1820	µmhos/cm		5	SM 2510B	7/7/2011 12:33:32 PM AMB
Total Dissolved Solids (180)	1360	mg/L		10	SM 2540	7/11/2011 3:25:00 PM JF
<b>Data Quality</b>						
Cation Sum	21.95	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Anion Sum	19.88	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Cation-Anion Balance (± 5%)	4.94	%		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Solids, Total Dissolved (Calc)	1240	mg/L		10	SM 1030E	7/25/2011 9:29:54 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-004  
**ClientSample ID:** HBWELL04  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 12:00:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	7/5/2011 4:51:32 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:20:37 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	7/1/2011 10:20:37 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	7/5/2011 4:51:32 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	7/1/2011 10:20:37 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:51:32 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	7/1/2011 10:20:37 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	7/5/2011 4:51:32 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:20:37 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	7/8/2011 10:20:50 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:20:37 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:51:32 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:20:37 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	7/1/2011 10:20:37 PM	MS
Uranium	0.0290	mg/L		0.0003	EPA 200.8	7/1/2011 10:20:37 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:20:37 PM	MS
Zinc	0.05	mg/L		0.01	EPA 200.7	7/5/2011 4:51:32 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	7/11/2011 12:28:16 PM	MS
<b>Metals - Total</b>							
Iron	1.21	mg/L		0.05	EPA 200.7	7/6/2011 6:20:41 PM	RS
Manganese	0.09	mg/L		0.02	EPA 200.7	7/6/2011 6:20:41 PM	RS

## These results apply only to the samples tested.

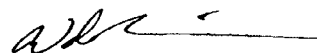
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- 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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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
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- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-004  
**ClientSample ID:** HBWELL04  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 12:00:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	20.9	pCi/L		4	SM 7110B	7/26/2011 7:48:00 PM SH
Gross Alpha Precision (±)	4.1	pCi/L			SM 7110B	7/26/2011 7:48:00 PM SH
Gross Beta	9.6	pCi/L		8	SM 7110B	7/26/2011 7:48:00 PM SH
Gross Beta Precision (±)	4.8	pCi/L			SM 7110B	7/26/2011 7:48:00 PM SH
Lead 210	1.8	pCi/L		1	OTW01	7/26/2011 3:25:38 PM SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	7/26/2011 3:25:38 PM SH
Polonium 210	ND	pCi/L		1	OTW01	7/26/2011 12:36:45 PM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/26/2011 12:36:45 PM SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	7/18/2011 6:00:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	7/18/2011 6:00:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	8/5/2011 3:40:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	8/5/2011 3:40:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 1:13:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 1:13:00 PM SH
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	7/22/2011 8:58:10 AM SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	7/22/2011 8:58:10 AM SH
Polonium 210	ND	pCi/L		1	OTW01	7/21/2011 9:00:03 AM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/21/2011 9:00:03 AM SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	7/21/2011 1:38:00 PM SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	7/21/2011 1:38:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 5:33:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 5:33:00 PM SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-006  
**ClientSample ID:** HBWELL05  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 2:30:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.01	s.u.			Field	6/29/2011 2:30:00 PM
Conductivity	1536	µmhos/cm			Field	6/29/2011 2:30:00 PM
Dissolved Oxygen	4.17	mg/L			Field	6/29/2011 2:30:00 PM
Dissolved Oxygen (pct)	39.2	%			Field	6/29/2011 2:30:00 PM
Turbidity	187	NTU			Field	6/29/2011 2:30:00 PM
Temperature	10.9	°C			Field	6/29/2011 2:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	538	mg/L		5	SM 2320B	7/7/2011 12:55:37 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	657	mg/L		5	SM 2320B	7/7/2011 12:55:37 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	7/7/2011 12:55:37 PM AMB
Chloride	6	mg/L		1	EPA 300.0	7/14/2011 4:07:00 PM ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	7/7/2011 12:55:37 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	0.3	mg/L		0.1	EPA 353.2	7/11/2011 3:33:00 PM MEL
Sulfate	409	mg/L		1	EPA 300.0	7/13/2011 6:42:00 PM ARF
Calcium	97	mg/L		1	EPA 200.7	7/5/2011 4:56:23 PM DG
Magnesium	44	mg/L		1	EPA 200.7	7/5/2011 4:56:23 PM DG
Potassium	12	mg/L		1	EPA 200.7	7/5/2011 4:56:23 PM DG
Sodium	288	mg/L		1	EPA 200.7	7/5/2011 4:56:23 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	7/11/2011 5:59:00 PM MEL
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	7/7/2011 12:55:37 PM AMB
Electrical Conductivity	1830	µmhos/cm		5	SM 2510B	7/7/2011 12:55:37 PM AMB
Total Dissolved Solids (180)	1190	mg/L		10	SM 2540	7/1/2011 3:40:00 PM JF
<b>Data Quality</b>						
Cation Sum	21.30	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Anion Sum	19.47	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Cation-Anion Balance (± 5%)	4.49	%		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Solids, Total Dissolved (Calc)	1180	mg/L		10	SM 1030E	7/25/2011 9:29:54 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-006  
**ClientSample ID:** HBWELL05  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 2:30:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	7/5/2011 4:56:23 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:36:38 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	7/1/2011 10:36:38 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	7/5/2011 4:56:23 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	7/1/2011 10:36:38 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:56:23 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	7/1/2011 10:36:38 PM	MS
Iron	0.47	mg/L		0.05	EPA 200.7	7/5/2011 4:56:23 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:36:38 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	7/8/2011 10:36:36 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:36:38 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:56:23 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:36:38 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	7/1/2011 10:36:38 PM	MS
Uranium	0.0106	mg/L		0.0003	EPA 200.8	7/1/2011 10:36:38 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:36:38 PM	MS
Zinc	0.01	mg/L		0.01	EPA 200.7	7/5/2011 4:56:23 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	7/11/2011 12:33:35 PM	MS
<b>Metals - Total</b>							
Iron	9.37	mg/L		0.05	EPA 200.7	7/6/2011 6:27:44 PM	RS
Manganese	0.08	mg/L		0.02	EPA 200.7	7/6/2011 6:27:44 PM	RS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-006  
**ClientSample ID:** HBWELL05  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 2:30:00 PM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.6	pCi/L		4	SM 7110B	7/26/2011 7:48:00 PM	SH
Gross Alpha Precision (±)	3.3	pCi/L			SM 7110B	7/26/2011 7:48:00 PM	SH
Gross Beta	12.1	pCi/L		8	SM 7110B	7/26/2011 7:48:00 PM	SH
Gross Beta Precision (±)	4.6	pCi/L			SM 7110B	7/26/2011 7:48:00 PM	SH
Lead 210	1.4	pCi/L		1	OTW01	7/26/2011 3:25:38 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	7/26/2011 3:25:38 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	7/26/2011 12:36:45 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/26/2011 12:36:45 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	7/18/2011 6:00:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	7/18/2011 6:00:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	8/5/2011 3:40:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	8/5/2011 3:40:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 1:13:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 1:13:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.7	pCi/L		1	OTW01	7/22/2011 8:58:10 AM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	7/22/2011 8:58:10 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	7/21/2011 9:00:03 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/21/2011 9:00:03 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	7/21/2011 1:38:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	7/21/2011 1:38:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/27/2011 9:23:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/27/2011 9:23:00 AM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-002  
**ClientSample ID:** P17177W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 12:40:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.85	s.u.			Field	5/17/2011 12:40:00 PM
Conductivity	893	µmhos/cm			Field	5/17/2011 12:40:00 PM
Dissolved Oxygen	3.49	mg/L			Field	5/17/2011 12:40:00 PM
Dissolved Oxygen (pct)	30.4	%			Field	5/17/2011 12:40:00 PM
Turbidity	0.54	NTU			Field	5/17/2011 12:40:00 PM
Temperature	8.5	°C			Field	5/17/2011 12:40:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	326	mg/L		5	SM 2320B	5/25/2011 1:48:50 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	398	mg/L		5	SM 2320B	5/25/2011 1:48:50 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	5/25/2011 1:48:50 AM AMB
Chloride	25	mg/L		1	EPA 300.0	5/19/2011 12:42:00 PM KO
Fluoride	0.1	mg/L		0.1	SM 4500FC	5/18/2011 3:46:00 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/27/2011 1:16:00 PM LJK
Sulfate	41	mg/L		1	EPA 300.0	5/19/2011 12:42:00 PM KO
Calcium	103	mg/L		1	EPA 200.7	5/23/2011 2:58:01 PM DG
Magnesium	27	mg/L		1	EPA 200.7	5/18/2011 8:43:11 PM DG
Potassium	5	mg/L		1	EPA 200.7	5/18/2011 8:43:11 PM DG
Sodium	33	mg/L		1	EPA 200.7	5/18/2011 8:43:11 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 4:39:00 PM LJK
<b>General Parameters</b>						
pH	7.9	s.u.		0.1	SM 4500 H B	5/18/2011 3:46:00 PM AMB
Electrical Conductivity	746	µmhos/cm		5	SM 2510B	5/18/2011 3:46:00 PM AMB
Total Dissolved Solids (180)	580	mg/L		10	SM 2540	5/18/2011 12:30:00 PM JF
<b>Data Quality</b>						
Cation Sum	8.93	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Anion Sum	8.08	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Cation-Anion Balance (± 5%)	4.98	%		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Solids, Total Dissolved (Calc)	430	mg/L		10	SM 1030E	5/31/2011 1:01:38 PM KO

These results apply only to the samples tested.

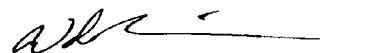
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-002  
**ClientSample ID:** P17177W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 12:40:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 8:43:11 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:28:16 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 12:28:16 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	5/18/2011 8:43:11 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 12:28:16 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:43:11 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 12:28:16 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/18/2011 8:43:11 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:28:16 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/24/2011 10:05:00 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:28:16 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:43:11 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:28:16 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	5/18/2011 12:28:16 PM	MS
Uranium	0.0263	mg/L		0.0003	EPA 200.8	5/18/2011 12:28:16 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:28:16 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:43:11 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 5:45:32 PM	MS
<b>Metals - Total</b>							
Iron	0.08	mg/L		0.05	EPA 200.7	5/19/2011 5:36:00 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	5/19/2011 5:36:00 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-002  
**ClientSample ID:** P17177W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 12:40:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	12.9	pCi/L		2	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	10.0	pCi/L		4	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/7/2011 4:14:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/7/2011 4:14:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:00:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:00:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/8/2011 1:17:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/8/2011 1:17:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-001  
**ClientSample ID:** P22582P  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 9:30:00 AM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.31	s.u.			Field	6/29/2011 9:30:00 AM
Conductivity	851	µmhos/cm			Field	6/29/2011 9:30:00 AM
Dissolved Oxygen	0.92	mg/L			Field	6/29/2011 9:30:00 AM
Dissolved Oxygen (pct)	8.7	%			Field	6/29/2011 9:30:00 AM
Turbidity	2.89	NTU			Field	6/29/2011 9:30:00 AM
Temperature	10.6	°C			Field	6/29/2011 9:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	381	mg/L		5	SM 2320B	7/7/2011 6:45:06 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	443	mg/L		5	SM 2320B	7/7/2011 6:45:06 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	11	mg/L		5	SM 2320B	7/7/2011 6:45:06 AM AMB
Chloride	6	mg/L		1	EPA 300.0	7/14/2011 2:12:00 PM ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	7/7/2011 6:45:06 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	7/11/2011 3:28:00 PM MEL
Sulfate	62	mg/L		1	EPA 300.0	7/13/2011 4:42:00 PM ARF
Calcium	24	mg/L		1	EPA 200.7	7/5/2011 4:29:42 PM DG
Magnesium	12	mg/L		1	EPA 200.7	7/5/2011 4:29:42 PM DG
Potassium	8	mg/L		1	EPA 200.7	7/5/2011 4:29:42 PM DG
Sodium	171	mg/L		1	EPA 200.7	7/5/2011 4:29:42 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	7/11/2011 5:54:00 PM MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	7/7/2011 6:45:06 AM AMB
Electrical Conductivity	895	µmhos/cm		5	SM 2510B	7/7/2011 6:45:06 AM AMB
Total Dissolved Solids (180)	520	mg/L		10	SM 2540	7/1/2011 3:10:00 PM JF
<b>Data Quality</b>						
Cation Sum	9.83	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Anion Sum	10.55	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Cation-Anion Balance (± 5%)	3.50	%		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Solids, Total Dissolved (Calc)	510	mg/L		10	SM 1030E	7/25/2011 9:29:54 AM KO

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-001  
**ClientSample ID:** P22582P  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 9:30:00 AM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	7/5/2011 4:29:42 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	7/1/2011 9:56:36 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	7/1/2011 9:56:36 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	7/5/2011 4:29:42 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	7/1/2011 9:56:36 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:29:42 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	7/1/2011 9:56:36 PM	MS
Iron	0.80	mg/L		0.05	EPA 200.7	7/5/2011 4:29:42 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	7/1/2011 9:56:36 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	7/8/2011 10:15:33 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	7/1/2011 9:56:36 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:29:42 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	7/1/2011 9:56:36 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	7/1/2011 9:56:36 PM	MS
Uranium	0.0035	mg/L		0.0003	EPA 200.8	7/1/2011 9:56:36 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	7/1/2011 9:56:36 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:29:42 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	7/11/2011 12:12:15 PM	MS
<b>Metals - Total</b>							
Iron	1.32	mg/L		0.05	EPA 200.7	7/6/2011 6:11:17 PM	RS
Manganese	0.05	mg/L		0.02	EPA 200.7	7/6/2011 6:11:17 PM	RS

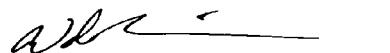
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-001  
**ClientSample ID:** P22582P  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 9:30:00 AM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	3.3	pCi/L		2	SM 7110B	7/26/2011 7:48:00 PM SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	7/26/2011 7:48:00 PM SH
Gross Beta	5.9	pCi/L		4	SM 7110B	7/26/2011 7:48:00 PM SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	7/26/2011 7:48:00 PM SH
Lead 210	1.6	pCi/L		1	OTW01	7/26/2011 3:25:38 PM SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	7/26/2011 3:25:38 PM SH
Polonium 210	ND	pCi/L		1	OTW01	7/26/2011 12:36:45 PM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/26/2011 12:36:45 PM SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	7/18/2011 6:00:00 PM SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	7/18/2011 6:00:00 PM SH
Radium 228	1.6	pCi/L		1	Ra-05	8/5/2011 3:40:00 PM SH
Radium 228 Precision (±)	0.9	pCi/L			Ra-05	8/5/2011 3:40:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 1:13:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 1:13:00 PM SH
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	7/20/2011 8:08:27 PM SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	7/20/2011 8:08:27 PM SH
Polonium 210	ND	pCi/L		1	OTW01	7/20/2011 2:57:57 PM SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/20/2011 2:57:57 PM SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	7/21/2011 1:38:00 PM SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	7/21/2011 1:38:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 5:33:00 PM SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 5:33:00 PM SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-001  
**ClientSample ID:** P42868W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 11:00:00 AM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.08	s.u.			Field	6/7/2011 11:00:00 AM
Conductivity	1295	µmhos/cm			Field	6/7/2011 11:00:00 AM
Dissolved Oxygen	1.48	mg/L			Field	6/7/2011 11:00:00 AM
Dissolved Oxygen (pct)	14.0	%			Field	6/7/2011 11:00:00 AM
Turbidity	2.83	NTU			Field	6/7/2011 11:00:00 AM
Temperature	12.9	°C			Field	6/7/2011 11:00:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	562	mg/L		5	SM 2320B	6/9/2011 9:59:44 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	651	mg/L		5	SM 2320B	6/9/2011 9:59:44 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	17	mg/L		5	SM 2320B	6/9/2011 9:59:44 PM KO
Chloride	2	mg/L		1	EPA 300.0	6/11/2011 8:10:00 PM KO
Fluoride	0.3	mg/L		0.1	SM 4500FC	6/10/2011 4:25:17 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	6/16/2011 7:14:00 PM MEL
Sulfate	119	mg/L		1	EPA 300.0	6/11/2011 8:10:00 PM KO
Calcium	3	mg/L		1	EPA 200.7	6/9/2011 1:56:40 PM DG
Magnesium	1	mg/L		1	EPA 200.7	6/9/2011 1:56:40 PM DG
Potassium	4	mg/L		1	EPA 200.7	6/9/2011 1:56:40 PM DG
Sodium	342	mg/L		1	EPA 200.7	6/9/2011 1:56:40 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	6/16/2011 3:11:00 PM MEL
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	6/9/2011 9:59:44 PM KO
Electrical Conductivity	1120	µmhos/cm		5	SM 2510B	6/10/2011 4:25:17 PM AMB
Total Dissolved Solids (180)	810	mg/L		10	SM 2540	6/10/2011 11:15:00 AM JF
<b>Data Quality</b>						
Cation Sum	15.21	meq/L		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Anion Sum	13.77	meq/L		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Cation-Anion Balance (± 5%)	4.95	%		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	7/22/2011 3:41:12 PM KO

These results apply only to the samples tested.

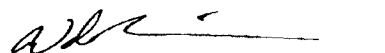
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-001  
**ClientSample ID:** P42868W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 11:00:00 AM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	6/9/2011 1:56:40 PM	DG
Arsenic	0.020	mg/L		0.005	EPA 200.8	6/8/2011 9:38:50 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	6/8/2011 9:38:50 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	6/9/2011 1:56:40 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	6/8/2011 9:38:50 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	6/9/2011 1:56:40 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	6/8/2011 9:38:50 PM	MS
Iron	0.09	mg/L		0.05	EPA 200.7	6/9/2011 1:56:40 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:38:50 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	6/14/2011 8:05:33 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:38:50 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	6/9/2011 1:56:40 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	6/8/2011 9:38:50 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	6/9/2011 12:55:27 PM	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	6/8/2011 9:38:50 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:38:50 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	6/9/2011 1:56:40 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	6/13/2011 6:02:02 PM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	6/9/2011 6:25:14 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	6/9/2011 6:25:14 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-001  
**ClientSample ID:** P42868W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 11:00:00 AM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

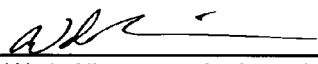
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	6/29/2011 8:09:18 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/22/2011 4:41:57 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/22/2011 4:41:57 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/22/2011 11:21:26 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/22/2011 11:21:26 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/20/2011 7:59:52 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/20/2011 7:59:52 PM	SH
Radium 228	1.8	pCi/L		1	Ra-05	7/11/2011 4:25:00 PM	SH
Radium 228 Precision (±)	1.2	pCi/L			Ra-05	7/11/2011 4:25:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/20/2011 12:21:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/20/2011 12:21:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.2	pCi/L		1	OTW01	6/24/2011 10:09:03 AM	SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	6/24/2011 10:09:03 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/23/2011 5:27:18 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/23/2011 5:27:18 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/24/2011 11:48:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/24/2011 11:48:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/22/2011 12:46:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/22/2011 12:46:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

Page 3 of 9



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-001  
**ClientSample ID:** P50113W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 12:00:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.94	s.u.			Field	5/17/2011 12:00:00 PM
Conductivity	1482	µmhos/cm			Field	5/17/2011 12:00:00 PM
Dissolved Oxygen	1.35	mg/L			Field	5/17/2011 12:00:00 PM
Dissolved Oxygen (pct)	11.5	%			Field	5/17/2011 12:00:00 PM
Turbidity	1.43	NTU			Field	5/17/2011 12:00:00 PM
Temperature	7.6	°C			Field	5/17/2011 12:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	534	mg/L		5	SM 2320B	5/18/2011 3:34:50 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	652	mg/L		5	SM 2320B	5/18/2011 3:34:50 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	5/18/2011 3:34:50 PM AMB
Chloride	39	mg/L		1	EPA 300.0	5/19/2011 12:29:00 PM KO
Fluoride	0.2	mg/L		0.1	SM 4500FC	5/18/2011 3:34:50 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	19.1	mg/L		0.1	EPA 353.2	5/24/2011 2:26:00 PM MEL
Sulfate	193	mg/L		1	EPA 300.0	5/19/2011 12:29:00 PM KO
Calcium	90	mg/L		1	EPA 200.7	5/18/2011 8:40:49 PM DG
Magnesium	50	mg/L		1	EPA 200.7	5/18/2011 8:40:49 PM DG
Potassium	7	mg/L		1	EPA 200.7	5/18/2011 8:40:49 PM DG
Sodium	193	mg/L		1	EPA 200.7	5/18/2011 8:40:49 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 4:32:00 PM LJK
<b>General Parameters</b>						
pH	7.9	s.u.		0.1	SM 4500 H B	5/18/2011 3:34:50 PM AMB
Electrical Conductivity	1260	µmhos/cm		5	SM 2510B	5/18/2011 3:34:50 PM AMB
Total Dissolved Solids (180)	1070	mg/L		10	SM 2540	5/18/2011 12:25:00 PM JF
<b>Data Quality</b>						
Cation Sum	17.14	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Anion Sum	17.18	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Cation-Anion Balance (± 5%)	0.11	%		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Solids, Total Dissolved (Calc)	910	mg/L		10	SM 1030E	5/31/2011 1:01:38 PM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-001  
**ClientSample ID:** P50113W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 12:00:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 8:40:49 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:12:34 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 12:12:34 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	5/18/2011 8:40:49 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 12:12:34 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:40:49 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 12:12:34 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/18/2011 8:40:49 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:12:34 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/20/2011 8:53:26 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:12:34 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:40:49 PM	DG
Selenium	0.027	mg/L		0.005	EPA 200.8	5/18/2011 12:12:34 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	5/18/2011 12:12:34 PM	MS
Uranium	0.207	mg/L		0.0003	EPA 200.8	5/18/2011 12:12:34 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:12:34 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:40:49 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 5:41:36 PM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	5/19/2011 5:31:19 PM	DG
Manganese	0.37	mg/L		0.02	EPA 200.7	5/19/2011 5:31:19 PM	DG

These results apply only to the samples tested.

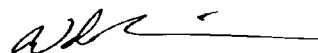
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-001  
**ClientSample ID:** P50113W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 12:00:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

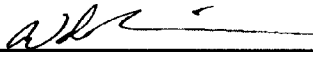
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	101	pCi/L		4	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	7.6	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	40.7	pCi/L		8	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	5.1	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/7/2011 4:14:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/7/2011 4:14:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 8:50:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 8:50:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.0	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/8/2011 1:17:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/8/2011 1:17:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-003  
**ClientSample ID:** P50883W  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 11:10:00 AM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.17	s.u.			Field	6/29/2011 11:10:00 AM
Conductivity	719	µmhos/cm			Field	6/29/2011 11:10:00 AM
Dissolved Oxygen	4.81	mg/L			Field	6/29/2011 11:10:00 AM
Dissolved Oxygen (pct)	46.4	%			Field	6/29/2011 11:10:00 AM
Turbidity	105	NTU			Field	6/29/2011 11:10:00 AM
Temperature	12.6	°C			Field	6/29/2011 11:10:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	348	mg/L		5	SM 2320B	7/7/2011 7:17:08 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	409	mg/L		5	SM 2320B	7/7/2011 7:17:08 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	8	mg/L		5	SM 2320B	7/7/2011 7:17:08 AM AMB
Chloride	4	mg/L		1	EPA 300.0	7/14/2011 3:28:00 PM ARF
Fluoride	0.2	mg/L		0.1	SM 4500FC	7/7/2011 7:17:08 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	7/11/2011 3:30:00 PM MEL
Sulfate	45	mg/L		1	EPA 300.0	7/14/2011 3:28:00 PM ARF
Calcium	46	mg/L		1	EPA 200.7	7/18/2011 6:08:22 PM DG
Magnesium	21	mg/L		1	EPA 200.7	7/18/2011 6:08:22 PM DG
Potassium	6	mg/L		1	EPA 200.7	7/18/2011 6:08:22 PM DG
Sodium	95	mg/L		1	EPA 200.7	7/18/2011 6:08:22 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	7/11/2011 5:56:00 PM MEL
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	7/7/2011 7:17:08 AM AMB
Electrical Conductivity	775	µmhos/cm		5	SM 2510B	7/7/2011 7:17:08 AM AMB
Total Dissolved Solids (180)	430	mg/L		10	SM 2540	7/1/2011 3:20:00 PM JF
<b>Data Quality</b>						
Cation Sum	8.29	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Anion Sum	8.01	meq/L		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Cation-Anion Balance (± 5%)	1.69	%		0.01	SM 1030E	7/25/2011 9:29:54 AM KO
Solids, Total Dissolved (Calc)	430	mg/L		10	SM 1030E	7/25/2011 9:29:54 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-003  
**ClientSample ID:** P50883W  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 11:10:00 AM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	7/5/2011 4:49:06 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:16:37 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	7/1/2011 10:16:37 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	7/5/2011 4:49:06 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	7/1/2011 10:16:37 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:49:06 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	7/1/2011 10:16:37 PM	MS
Iron	0.07	mg/L		0.05	EPA 200.7	7/5/2011 4:49:06 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:16:37 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	7/8/2011 10:19:05 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:16:37 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	7/5/2011 4:49:06 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	7/1/2011 10:16:37 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	7/1/2011 10:16:37 PM	MS
Uranium	0.0278	mg/L		0.0003	EPA 200.8	7/1/2011 10:16:37 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	7/1/2011 10:16:37 PM	MS
Zinc	0.14	mg/L		0.01	EPA 200.7	7/5/2011 4:49:06 PM	DG
<b>Metals - Suspended</b>							
Uranium	0.0003	mg/L		0.0003	EPA 200.8	7/11/2011 12:25:36 PM	MS
<b>Metals - Total</b>							
Iron	8.94	mg/L		0.05	EPA 200.7	7/6/2011 6:15:58 PM	RS
Manganese	0.11	mg/L		0.02	EPA 200.7	7/6/2011 6:15:58 PM	RS

These results apply only to the samples tested.

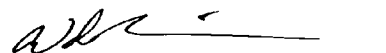
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 8/11/2011  
**Report ID:** S1107004001

**ProjectName:** ROSS ISR  
**Lab ID:** S1107004-003  
**ClientSample ID:** P50883W  
**COC:** 137104

**WorkOrder:** S1107004  
**CollectionDate:** 6/29/2011 11:10:00 AM  
**DateReceived:** 6/30/2011 8:16:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	14.8	pCi/L		2	SM 7110B	7/26/2011 7:48:00 PM	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	7/26/2011 7:48:00 PM	SH
Gross Beta	12.3	pCi/L		4	SM 7110B	7/26/2011 7:48:00 PM	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	7/26/2011 7:48:00 PM	SH
Lead 210	3.5	pCi/L		1	OTW01	7/26/2011 3:25:38 PM	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	7/26/2011 3:25:38 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	7/26/2011 12:36:45 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	7/26/2011 12:36:45 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	7/18/2011 6:00:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	7/18/2011 6:00:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	8/5/2011 3:40:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	8/5/2011 3:40:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 1:13:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 1:13:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	3.4	pCi/L		1	OTW01	7/22/2011 8:58:10 AM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	7/22/2011 8:58:10 AM	SH
Polonium 210	1.2	pCi/L		1	OTW01	7/21/2011 9:00:03 AM	SH
Polonium 210 Precision (±)	0.5	pCi/L			OTW01	7/21/2011 9:00:03 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	7/21/2011 1:38:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	7/21/2011 1:38:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	7/26/2011 5:33:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	7/26/2011 5:33:00 PM	SH

## These results apply only to the samples tested.

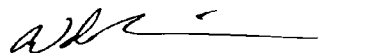
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-002  
**ClientSample ID:** P61006W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 11:50:00 AM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.43	s.u.			Field	6/7/2011 11:50:00 AM
Conductivity	1042	µmhos/cm			Field	6/7/2011 11:50:00 AM
Dissolved Oxygen	1.09	mg/L			Field	6/7/2011 11:50:00 AM
Dissolved Oxygen (pct)	10.1	%			Field	6/7/2011 11:50:00 AM
Turbidity	3.03	NTU			Field	6/7/2011 11:50:00 AM
Temperature	10.8	°C			Field	6/7/2011 11:50:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	491	mg/L		5	SM 2320B	6/9/2011 10:08:26 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	599	mg/L		5	SM 2320B	6/9/2011 10:08:26 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	6/9/2011 10:08:26 PM KO
Chloride	1	mg/L		1	EPA 300.0	6/11/2011 8:22:00 PM KO
Fluoride	0.1	mg/L		0.1	SM 4500FC	6/10/2011 4:28:30 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	6/16/2011 7:15:00 PM MEL
Sulfate	70	mg/L		1	EPA 300.0	6/11/2011 8:22:00 PM KO
Calcium	18	mg/L		1	EPA 200.7	6/9/2011 2:01:22 PM DG
Magnesium	9	mg/L		1	EPA 200.7	6/9/2011 2:01:22 PM DG
Potassium	8	mg/L		1	EPA 200.7	6/9/2011 2:01:22 PM DG
Sodium	239	mg/L		1	EPA 200.7	6/9/2011 2:01:22 PM DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	6/16/2011 3:12:00 PM MEL
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	6/9/2011 10:08:26 PM KO
Electrical Conductivity	880	µmhos/cm		5	SM 2510B	6/9/2011 10:08:26 PM KO
Total Dissolved Solids (180)	640	mg/L		10	SM 2540	6/10/2011 11:20:00 AM JF
<b>Data Quality</b>						
Cation Sum	12.19	meq/L		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Anion Sum	11.31	meq/L		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Cation-Anion Balance (± 5%)	3.77	%		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Solids, Total Dissolved (Calc)	640	mg/L		10	SM 1030E	7/22/2011 3:41:12 PM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-002  
**ClientSample ID:** P61006W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 11:50:00 AM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	6/9/2011 2:01:22 PM	DG
Arsenic	0.005	mg/L		0.005	EPA 200.8	6/8/2011 9:42:51 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	6/8/2011 9:42:51 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	6/9/2011 2:01:22 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	6/8/2011 9:42:51 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	6/9/2011 2:01:22 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	6/8/2011 9:42:51 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	6/9/2011 2:01:22 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:42:51 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	6/14/2011 11:40:31 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:42:51 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	6/9/2011 2:01:22 PM	DG
Selenium	0.006	mg/L		0.005	EPA 200.8	6/8/2011 9:42:51 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	6/9/2011 12:59:27 PM	MS
Uranium	0.0016	mg/L		0.0003	EPA 200.8	6/8/2011 9:42:51 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:42:51 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	6/9/2011 2:01:22 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	6/13/2011 6:06:01 PM	MS
<b>Metals - Total</b>							
Iron	0.40	mg/L		0.05	EPA 200.7	6/9/2011 6:30:01 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	6/9/2011 6:30:01 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-002  
**ClientSample ID:** P61006W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 11:50:00 AM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	5.2	pCi/L		2	SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Alpha Precision (±)	1.7	pCi/L			SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Beta	5.3	pCi/L		4	SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Beta Precision (±)	2.5	pCi/L			SM 7110B	6/29/2011 8:09:18 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/22/2011 4:41:57 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/22/2011 4:41:57 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/22/2011 11:21:26 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/22/2011 11:21:26 AM	SH
Radium 226	0.6	pCi/L		0.2	SM 7500-Ra B	6/20/2011 7:59:52 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/20/2011 7:59:52 PM	SH
Radium 228	3.2	pCi/L		1	Ra-05	7/11/2011 4:25:00 PM	SH
Radium 228 Precision (±)	1.2	pCi/L			Ra-05	7/11/2011 4:25:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/20/2011 12:21:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/20/2011 12:21:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/24/2011 10:09:03 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/24/2011 10:09:03 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/23/2011 5:27:18 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/23/2011 5:27:18 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/24/2011 11:48:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/24/2011 11:48:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/23/2011 8:31:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/23/2011 8:31:00 AM	SH

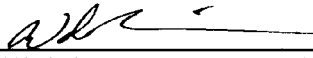
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-003  
**ClientSample ID:** P61007W  
**COC:** 136441

**Date Reported:** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)  
**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 12:30:00 PM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.01	s.u.			Field	6/7/2011 12:30:00 PM
Conductivity	1135	µmhos/cm			Field	6/7/2011 12:30:00 PM
Dissolved Oxygen	2.37	mg/L			Field	6/7/2011 12:30:00 PM
Dissolved Oxygen (pct)	22.3	%			Field	6/7/2011 12:30:00 PM
Turbidity	6.72	NTU			Field	6/7/2011 12:30:00 PM
Temperature	11.4	°C			Field	6/7/2011 12:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	531	mg/L		5	SM 2320B	6/9/2011 10:16:06 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	619	mg/L		5	SM 2320B	6/9/2011 10:16:06 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	15	mg/L		5	SM 2320B	6/9/2011 10:16:06 PM KO
Chloride	1	mg/L		1	EPA 300.0	6/11/2011 8:33:00 PM KO
Fluoride	0.2	mg/L		0.1	SM 4500FC	6/10/2011 4:31:43 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	6/16/2011 7:21:00 PM MEL
Sulfate	81	mg/L		1	EPA 300.0	6/11/2011 8:33:00 PM KO
Calcium	3	mg/L		1	EPA 200.7	6/9/2011 2:15:24 PM DG
Magnesium	1	mg/L		1	EPA 200.7	6/9/2011 2:15:24 PM DG
Potassium	3	mg/L		1	EPA 200.7	6/9/2011 2:15:24 PM DG
Sodium	295	mg/L		1	EPA 200.7	6/9/2011 2:15:24 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	6/16/2011 3:14:00 PM MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	6/9/2011 10:16:06 PM KO
Electrical Conductivity	985	µmhos/cm		5	SM 2510B	6/9/2011 10:16:06 PM KO
Total Dissolved Solids (180)	720	mg/L		10	SM 2540	6/10/2011 11:25:00 AM JF
<b>Data Quality</b>						
Cation Sum	13.17	meq/L		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Anion Sum	12.35	meq/L		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Cation-Anion Balance (± 5%)	3.19	%		0.01	SM 1030E	7/22/2011 3:41:12 PM KO
Solids, Total Dissolved (Calc)	700	mg/L		10	SM 1030E	7/22/2011 3:41:12 PM KO

## These results apply only to the samples tested.

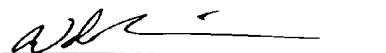
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-003  
**ClientSample ID:** P61007W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 12:30:00 PM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	6/9/2011 2:15:24 PM	DG
Arsenic	0.008	mg/L		0.005	EPA 200.8	6/8/2011 9:46:51 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	6/8/2011 9:46:51 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	6/9/2011 2:15:24 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	6/8/2011 9:46:51 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	6/9/2011 2:15:24 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	6/8/2011 9:46:51 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	6/9/2011 2:15:24 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:46:51 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	6/14/2011 11:40:31 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:46:51 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	6/9/2011 2:15:24 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	6/8/2011 9:46:51 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	6/9/2011 1:03:26 PM	MS
Uranium	0.0041	mg/L		0.0003	EPA 200.8	6/8/2011 9:46:51 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	6/8/2011 9:46:51 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	6/9/2011 2:15:24 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	6/13/2011 6:10:01 PM	MS
<b>Metals - Total</b>							
Iron	0.30	mg/L		0.05	EPA 200.7	6/9/2011 6:37:13 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	6/9/2011 6:37:13 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1106157002  
(Replaces S1106157001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1106157-003  
**ClientSample ID:** P61007W  
**COC:** 136441

**WorkOrder:** S1106157  
**CollectionDate:** 6/7/2011 12:30:00 PM  
**DateReceived:** 6/7/2011 3:50:00 PM  
**FieldSampler:**  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	5.2	pCi/L		2	SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Alpha Precision (±)	1.4	pCi/L			SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	6/29/2011 8:09:18 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	6/29/2011 8:09:18 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/22/2011 4:41:57 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/22/2011 4:41:57 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/22/2011 11:21:26 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/22/2011 11:21:26 AM	SH
Radium 226	1.4	pCi/L		0.2	SM 7500-Ra B	6/20/2011 7:59:52 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/20/2011 7:59:52 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	7/11/2011 4:25:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	7/11/2011 4:25:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/20/2011 12:21:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/20/2011 12:21:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/24/2011 10:09:03 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/24/2011 10:09:03 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/23/2011 5:27:18 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/23/2011 5:27:18 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/24/2011 11:48:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/24/2011 11:48:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/23/2011 8:32:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/23/2011 8:32:00 AM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-004  
**ClientSample ID:** P71108W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 2:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.87	s.u.			Field	5/17/2011 2:30:00 PM
Conductivity	1788	µmhos/cm			Field	5/17/2011 2:30:00 PM
Dissolved Oxygen	0.88	mg/L			Field	5/17/2011 2:30:00 PM
Dissolved Oxygen (pct)	7.8	%			Field	5/17/2011 2:30:00 PM
Turbidity	0.37	NTU			Field	5/17/2011 2:30:00 PM
Temperature	9.2	°C			Field	5/17/2011 2:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	590	mg/L		5	SM 2320B	5/18/2011 4:17:27 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	720	mg/L		5	SM 2320B	5/18/2011 4:17:27 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	5/18/2011 4:17:27 PM AMB
Chloride	8	mg/L		1	EPA 300.0	5/19/2011 1:07:00 PM KO
Fluoride	0.2	mg/L		0.1	SM 4500FC	5/18/2011 4:17:27 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	5/19/2011 5:53:00 PM LJK
Sulfate	516	mg/L		1	EPA 300.0	5/19/2011 1:07:00 PM KO
Calcium	62	mg/L		1	EPA 200.7	5/18/2011 9:02:05 PM DG
Magnesium	67	mg/L		1	EPA 200.7	5/18/2011 9:02:05 PM DG
Potassium	9	mg/L		1	EPA 200.7	5/18/2011 9:02:05 PM DG
Sodium	329	mg/L		1	EPA 200.7	5/18/2011 9:02:05 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 4:41:00 PM LJK
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	5/18/2011 4:17:27 PM AMB
Electrical Conductivity	1600	µmhos/cm		5	SM 2510B	5/18/2011 4:17:27 PM AMB
Total Dissolved Solids (180)	1460	mg/L		10	SM 2540	5/18/2011 12:40:00 PM JF
<b>Data Quality</b>						
Cation Sum	23.13	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Anion Sum	22.79	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Cation-Anion Balance (± 5%)	0.74	%		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Solids, Total Dissolved (Calc)	1350	mg/L		10	SM 1030E	5/31/2011 1:01:38 PM KO

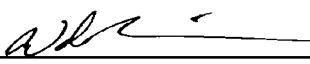
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-004  
**ClientSample ID:** P71108W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 2:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:02:05 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:36:06 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 12:36:06 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	5/18/2011 9:02:05 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 12:36:06 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:02:05 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 12:36:06 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/18/2011 9:02:05 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:36:06 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/24/2011 10:09:00 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:36:06 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:02:05 PM	DG
Selenium	0.008	mg/L		0.005	EPA 200.8	5/18/2011 12:36:06 PM	MS
Silver	0.039	mg/L		0.003	EPA 200.8	5/18/2011 12:36:06 PM	MS
Uranium	0.0970	mg/L		0.0003	EPA 200.8	5/18/2011 12:36:06 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:36:06 PM	MS
Zinc	0.03	mg/L		0.01	EPA 200.7	5/18/2011 9:02:05 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 6:01:16 PM	MS
<b>Metals - Total</b>							
Iron	0.33	mg/L		0.05	EPA 200.7	5/19/2011 5:45:21 PM	DG
Manganese	0.31	mg/L		0.02	EPA 200.7	5/19/2011 5:45:21 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-004  
**ClientSample ID:** P71108W  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 2:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	50.2	pCi/L		4	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	5.4	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	20.9	pCi/L		7	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	4.6	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/7/2011 4:14:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/7/2011 4:14:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:00:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:00:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/8/2011 1:17:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/8/2011 1:17:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-004  
**ClientSample ID:** P84665W  
**COC:** 136437

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)  
**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 10:20:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.87	s.u.			Field	5/17/2011 10:20:00 AM
Conductivity	1038	µmhos/cm			Field	5/17/2011 10:20:00 AM
Dissolved Oxygen	2.60	mg/L			Field	5/17/2011 10:20:00 AM
Dissolved Oxygen (pct)	20.6	%			Field	5/17/2011 10:20:00 AM
Turbidity	0.81	NTU			Field	5/17/2011 10:20:00 AM
Temperature	7.5	°C			Field	5/17/2011 10:20:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	471	mg/L		5	SM 2320B	5/18/2011 5:20:19 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	575	mg/L		5	SM 2320B	5/18/2011 5:20:19 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	5/18/2011 5:20:19 PM AMB
Chloride	11	mg/L		1	EPA 300.0	5/19/2011 3:23:00 PM KO
Fluoride	0.1	mg/L		0.1	SM 4500FC	5/18/2011 5:20:19 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	1.1	mg/L		0.1	EPA 353.2	5/24/2011 2:31:00 PM MEL
Sulfate	109	mg/L		1	EPA 300.0	5/19/2011 3:23:00 PM KO
Calcium	88	mg/L		1	EPA 200.7	5/18/2011 9:18:41 PM DG
Magnesium	38	mg/L		1	EPA 200.7	5/18/2011 9:18:41 PM DG
Potassium	5	mg/L		1	EPA 200.7	5/18/2011 9:18:41 PM DG
Sodium	83	mg/L		1	EPA 200.7	5/18/2011 9:18:41 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 4:47:00 PM LJK
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	5/18/2011 5:20:19 PM AMB
Electrical Conductivity	875	µmhos/cm		5	SM 2510B	5/18/2011 5:20:19 PM AMB
Total Dissolved Solids (180)	690	mg/L		10	SM 2540	5/18/2011 1:15:00 PM JF
<b>Data Quality</b>						
Cation Sum	11.24	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Anion Sum	12.07	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Cation-Anion Balance (± 5%)	3.55	%		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Solids, Total Dissolved (Calc)	620	mg/L		10	SM 1030E	6/21/2011 12:21:22 PM WN

These results apply only to the samples tested.

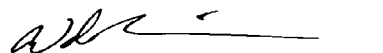
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-004  
**ClientSample ID:** P84665W  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 10:20:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:18:41 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 1:20:46 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 1:20:46 PM MS
Boron	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:18:41 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 1:20:46 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:18:41 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 1:20:46 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	5/18/2011 9:18:41 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:20:46 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/20/2011 9:14:28 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:20:46 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:18:41 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/18/2011 1:20:46 PM MS
Silver	0.004	mg/L		0.003	EPA 200.8	5/18/2011 1:20:46 PM MS
Uranium	0.0688	mg/L		0.0003	EPA 200.8	5/18/2011 1:20:46 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:20:46 PM MS
Zinc	0.03	mg/L		0.01	EPA 200.7	5/18/2011 9:18:41 PM DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 6:28:47 PM MS
<b>Metals - Total</b>						
Iron	0.11	mg/L		0.05	EPA 200.7	5/19/2011 6:06:23 PM DG
Manganese	0.02	mg/L		0.02	EPA 200.7	5/19/2011 6:06:23 PM DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-004  
**ClientSample ID:** P84665W  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 10:20:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	41.1	pCi/L		2	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	4.0	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	17.6	pCi/L		4	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/20/2011 2:21:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/20/2011 2:21:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:01:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:01:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.4	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/9/2011 2:20:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/9/2011 2:20:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-005  
**ClientSample ID:** SBWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 11:30:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.18	s.u.			Field	5/17/2011 11:30:00 AM
Conductivity	1162	µmhos/cm			Field	5/17/2011 11:30:00 AM
Dissolved Oxygen	0.84	mg/L			Field	5/17/2011 11:30:00 AM
Dissolved Oxygen (pct)	7.5	%			Field	5/17/2011 11:30:00 AM
Turbidity	0.53	NTU			Field	5/17/2011 11:30:00 AM
Temperature	9.9	°C			Field	5/17/2011 11:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	536	mg/L		5	SM 2320B	5/18/2011 5:30:42 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	595	mg/L		5	SM 2320B	5/18/2011 5:30:42 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	29	mg/L		5	SM 2320B	5/18/2011 5:30:42 PM AMB
Chloride	2	mg/L		1	EPA 300.0	5/19/2011 3:35:00 PM KO
Fluoride	0.1	mg/L		0.1	SM 4500FC	5/18/2011 5:30:42 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/19/2011 6:00:00 PM LJK
Sulfate	93	mg/L		1	EPA 300.0	5/19/2011 3:35:00 PM KO
Calcium	2	mg/L		1	EPA 200.7	5/18/2011 9:32:52 PM DG
Magnesium	ND	mg/L		1	EPA 200.7	5/18/2011 9:32:52 PM DG
Potassium	3	mg/L		1	EPA 200.7	5/18/2011 9:32:52 PM DG
Sodium	307	mg/L		1	EPA 200.7	5/18/2011 9:32:52 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 4:48:00 PM LJK
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	5/18/2011 5:30:42 PM AMB
Electrical Conductivity	1010	µmhos/cm		5	SM 2510B	5/18/2011 5:30:42 PM AMB
Total Dissolved Solids (180)	740	mg/L		10	SM 2540	5/18/2011 1:20:00 PM JF
<b>Data Quality</b>						
Cation Sum	13.51	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Anion Sum	12.70	meq/L		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Cation-Anion Balance (± 5%)	3.09	%		0.01	SM 1030E	6/21/2011 12:21:22 PM WN
Solids, Total Dissolved (Calc)	730	mg/L		10	SM 1030E	6/21/2011 12:21:22 PM WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-005  
**ClientSample ID:** SBWELL 01  
**COC:** 136437

**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 11:30:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 9:32:52 PM	DG
Arsenic	0.007	mg/L		0.005	EPA 200.8	5/18/2011 1:24:33 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 1:24:33 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	5/18/2011 9:32:52 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 1:24:33 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:32:52 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 1:24:33 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/18/2011 9:32:52 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:24:33 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/20/2011 9:23:12 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:24:33 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:32:52 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/18/2011 1:24:33 PM	MS
Silver	0.005	mg/L		0.003	EPA 200.8	5/18/2011 1:24:33 PM	MS
Uranium	0.0014	mg/L		0.0003	EPA 200.8	5/18/2011 1:24:33 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 1:24:33 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/18/2011 9:32:52 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 6:32:43 PM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	5/19/2011 6:11:04 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	5/19/2011 6:11:04 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**ProjectName:** ROSS ISR  
**Lab ID:** S1105255-005  
**ClientSample ID:** SBWELL 01  
**COC:** 136437

**Date Reported:** 7/22/2011  
**Report ID:** S1105255002  
(Replaces S1105255001)  
**WorkOrder:** S1105255  
**CollectionDate:** 5/17/2011 11:30:00 AM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	1.2	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/20/2011 2:21:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/20/2011 2:21:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:01:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:01:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011 9:26:05 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/9/2011 2:20:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/9/2011 2:20:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-003  
**ClientSample ID:** SBWELL 02  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 1:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.25	s.u.			Field	5/17/2011 1:30:00 PM
Conductivity	1011	µmhos/cm			Field	5/17/2011 1:30:00 PM
Dissolved Oxygen	3.05	mg/L			Field	5/17/2011 1:30:00 PM
Dissolved Oxygen (pct)	27.6	%			Field	5/17/2011 1:30:00 PM
Turbidity	1.15	NTU			Field	5/17/2011 1:30:00 PM
Temperature	9.4	°C			Field	5/17/2011 1:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	481	mg/L		5	SM 2320B	5/18/2011 3:56:34 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	587	mg/L		5	SM 2320B	5/18/2011 3:56:34 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	5/18/2011 3:56:34 PM AMB
Chloride	ND	mg/L		1	EPA 300.0	5/19/2011 12:54:00 PM KO
Fluoride	0.2	mg/L		0.1	SM 4500FC	5/18/2011 3:56:34 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/19/2011 5:52:00 PM LJK
Sulfate	80	mg/L		1	EPA 300.0	5/19/2011 12:54:00 PM KO
Calcium	20	mg/L		1	EPA 200.7	5/18/2011 8:47:54 PM DG
Magnesium	11	mg/L		1	EPA 200.7	5/18/2011 8:47:54 PM DG
Potassium	12	mg/L		1	EPA 200.7	5/18/2011 8:47:54 PM DG
Sodium	219	mg/L		1	EPA 200.7	5/18/2011 8:47:54 PM DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	5/19/2011 4:40:00 PM LJK
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	5/18/2011 3:56:34 PM AMB
Electrical Conductivity	858	µmhos/cm		5	SM 2510B	5/18/2011 3:56:34 PM AMB
Total Dissolved Solids (180)	650	mg/L		10	SM 2540	5/18/2011 12:35:00 PM JF
<b>Data Quality</b>						
Cation Sum	11.76	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Anion Sum	11.29	meq/L		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Cation-Anion Balance (± 5%)	2.03	%		0.01	SM 1030E	5/31/2011 1:01:38 PM KO
Solids, Total Dissolved (Calc)	630	mg/L		10	SM 1030E	5/31/2011 1:01:38 PM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-003  
**ClientSample ID:** SBWELL 02  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 1:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/18/2011 8:47:54 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:32:11 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/18/2011 12:32:11 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	5/18/2011 8:47:54 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/18/2011 12:32:11 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:47:54 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/18/2011 12:32:11 PM	MS
Iron	0.07	mg/L		0.05	EPA 200.7	5/18/2011 8:47:54 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:32:11 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/24/2011 10:07:00 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:32:11 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:47:54 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/18/2011 12:32:11 PM	MS
Silver	0.031	mg/L		0.003	EPA 200.8	5/18/2011 12:32:11 PM	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	5/18/2011 12:32:11 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/18/2011 12:32:11 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/18/2011 8:47:54 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 5:57:20 PM	MS
<b>Metals - Total</b>							
Iron	0.13	mg/L		0.05	EPA 200.7	5/19/2011 5:43:01 PM	DG
Manganese	0.05	mg/L		0.02	EPA 200.7	5/19/2011 5:43:01 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/21/2011  
**Report ID:** S1105253001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105253-003  
**ClientSample ID:** SBWELL 02  
**COC:** 136439

**WorkOrder:** S1105253  
**CollectionDate:** 5/17/2011 1:30:00 PM  
**DateReceived:** 5/18/2011 8:45:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta	8.4	pCi/L		4	SM 7110B	6/1/2011 7:45:37 PM	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	6/1/2011 7:45:37 PM	SH
Lead 210	ND	pCi/L		1	OTW01	6/1/2011 8:24:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 8:24:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/1/2011 5:17:08 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/1/2011 5:17:08 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/7/2011 11:36:29 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	6/7/2011 4:14:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	6/7/2011 4:14:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/7/2011 1:00:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/7/2011 1:00:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	6/2/2011 4:31:20 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 4:31:20 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/2/2011 12:41:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/2/2011 12:41:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/15/2011	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/15/2011	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/8/2011 1:17:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/8/2011 1:17:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105120001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105120-001  
**ClientSample ID:** TW01  
**COC:** 136435

**WorkOrder:** S1105120  
**CollectionDate:** 5/5/2011 9:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.56	s.u.			Field	5/5/2011 9:30:00 AM
Conductivity	1938	µmhos/cm			Field	5/5/2011 9:30:00 AM
Dissolved Oxygen	1.41	mg/L			Field	5/5/2011 9:30:00 AM
Dissolved Oxygen (pct)	12.6	%			Field	5/5/2011 9:30:00 AM
Turbidity	0.69	NTU			Field	5/5/2011 9:30:00 AM
Temperature	9.4	°C			Field	5/5/2011 9:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	683	mg/L		5	SM 2320B	5/9/2011 5:46:16 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	796	mg/L		5	SM 2320B	5/9/2011 5:46:16 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	18	mg/L		5	SM 2320B	5/9/2011 5:46:16 PM AMB
Chloride	6	mg/L		1	EPA 300.0	5/10/2011 7:22:00 PM LK
Fluoride	1.0	mg/L		0.1	SM 4500FC	5/9/2011 5:46:16 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/16/2011 1:19:00 PM LJK
Sulfate	400	mg/L		1	EPA 300.0	5/10/2011 7:22:00 PM LK
Calcium	9	mg/L		1	EPA 200.7	5/9/2011 8:26:45 PM DG
Magnesium	4	mg/L		1	EPA 200.7	5/9/2011 8:26:45 PM DG
Potassium	8	mg/L		1	EPA 200.7	5/9/2011 8:26:45 PM DG
Sodium	539	mg/L		1	EPA 200.7	5/9/2011 8:26:45 PM DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	5/19/2011 12:00:00 PM MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	5/9/2011 5:46:16 PM AMB
Electrical Conductivity	1770	µmhos/cm		5	SM 2510B	5/9/2011 5:46:16 PM AMB
Total Dissolved Solids (180)	1390	mg/L		10	SM 2540	5/10/2011 6:30:00 PM JF
<b>Data Quality</b>						
Cation Sum	24.42	meq/L		0.01	SM 1030E	5/17/2011 11:03:39 AM KO
Anion Sum	22.19	meq/L		0.01	SM 1030E	5/17/2011 11:03:39 AM KO
Cation-Anion Balance (± 5%)	4.77	%		0.01	SM 1030E	5/17/2011 11:03:39 AM KO
Solids, Total Dissolved (Calc)	1370	mg/L		10	SM 1030E	5/17/2011 11:03:39 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105120001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105120-001  
**ClientSample ID:** TW01  
**COC:** 136435

**WorkOrder:** S1105120  
**CollectionDate:** 5/5/2011 9:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/9/2011 8:26:45 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:37:55 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/9/2011 3:37:55 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	5/9/2011 8:26:45 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/9/2011 3:37:55 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:26:45 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/9/2011 3:37:55 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/9/2011 8:26:45 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:37:55 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/12/2011 10:57:40 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:37:55 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:26:45 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:37:55 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	5/9/2011 3:37:55 PM	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	5/9/2011 3:37:55 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:37:55 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:26:45 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 9:02:18 PM	MS
<b>Metals - Total</b>							
Iron	0.07	mg/L		0.05	EPA 200.7	5/9/2011 8:19:15 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	5/9/2011 8:19:15 PM	DG

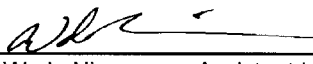
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105120001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105120-001  
**ClientSample ID:** TW01  
**COC:** 136435

**WorkOrder:** S1105120  
**CollectionDate:** 5/5/2011 9:30:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Beta	ND	pCi/L		7	SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	5/23/2011 10:58:28 PM	SH
Lead 210	ND	pCi/L		1	OTW01	5/20/2011 11:03:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	5/20/2011 11:03:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	5/19/2011 4:01:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/19/2011 4:01:33 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	5/25/2011 9:54:14 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	5/25/2011 9:54:14 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	5/31/2011 2:47:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	5/31/2011 2:47:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/3/2011 4:13:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/3/2011 4:13:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	5/31/2011 7:23:34 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	5/31/2011 7:23:34 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	5/27/2011 4:22:46 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/27/2011 4:22:46 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	5/18/2011 4:17:32 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	5/18/2011 4:17:32 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/6/2011 12:18:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/6/2011 12:18:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/10/2011  
**Report ID:** S1105107001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105107-001  
**ClientSample ID:** TWO2  
**COC:** 136433

**WorkOrder:** S1105107  
**CollectionDate:** 5/4/2011 3:30:00 PM  
**DateReceived:** 5/5/2011 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.45	s.u.			Field	5/4/2011 3:30:00 PM
Conductivity	2770	µmhos/cm			Field	5/4/2011 3:30:00 PM
Dissolved Oxygen	2.00	mg/L			Field	5/4/2011 3:30:00 PM
Dissolved Oxygen (pct)	16.3	%			Field	5/4/2011 3:30:00 PM
Turbidity	0.36	NTU			Field	5/4/2011 3:30:00 PM
Temperature	7.5	°C			Field	5/4/2011 3:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	627	mg/L		5	SM 2320B	5/7/2011 12:51:09 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	734	mg/L		5	SM 2320B	5/7/2011 12:51:09 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	15	mg/L		5	SM 2320B	5/7/2011 12:51:09 AM AMB
Chloride	10	mg/L		1	EPA 300.0	5/10/2011 11:47:00 AM LK
Fluoride	0.5	mg/L		0.1	SM 4500FC	5/7/2011 12:51:09 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/16/2011 12:59:00 PM LJK
Sulfate	500	mg/L		1	EPA 300.0	5/10/2011 11:47:00 AM LK
Calcium	25	mg/L		1	EPA 200.7	5/9/2011 6:27:15 PM DG
Magnesium	11	mg/L		1	EPA 200.7	5/9/2011 6:27:15 PM DG
Potassium	12	mg/L		1	EPA 200.7	5/9/2011 6:27:15 PM DG
Sodium	518	mg/L		1	EPA 200.7	5/9/2011 6:27:15 PM DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	5/19/2011 11:22:00 AM MEL
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	5/7/2011 12:51:09 AM AMB
Electrical Conductivity	1770	µmhos/cm		5	SM 2510B	5/7/2011 12:51:09 AM AMB
Total Dissolved Solids (180)	1510	mg/L		10	SM 2540	5/10/2011 5:25:00 PM JF
<b>Data Quality</b>						
Cation Sum	24.98	meq/L		0.01	SM 1030E	5/17/2011 10:55:01 AM KO
Anion Sum	23.25	meq/L		0.01	SM 1030E	5/17/2011 10:55:01 AM KO
Cation-Anion Balance (± 5%)	3.57	%		0.01	SM 1030E	5/17/2011 10:55:01 AM KO
Solids, Total Dissolved (Calc)	1450	mg/L		10	SM 1030E	5/17/2011 10:55:01 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/10/2011  
**Report ID:** S1105107001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105107-001  
**ClientSample ID:** TWO2  
**COC:** 136433

**WorkOrder:** S1105107  
**CollectionDate:** 5/4/2011 3:30:00 PM  
**DateReceived:** 5/5/2011 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/9/2011 6:27:15 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/6/2011 5:25:40 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/6/2011 5:25:40 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	5/9/2011 6:27:15 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/6/2011 5:25:40 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/9/2011 6:27:15 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/6/2011 5:25:40 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/9/2011 6:27:15 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/6/2011 5:25:40 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/10/2011 4:59:33 PM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/6/2011 5:25:40 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/9/2011 6:27:15 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/6/2011 5:25:40 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	5/6/2011 5:25:40 PM	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	5/6/2011 5:25:40 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/6/2011 5:25:40 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/9/2011 6:27:15 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/11/2011 12:07:44 PM	MS
<b>Metals - Total</b>							
Iron	0.06	mg/L		0.05	EPA 200.7	5/9/2011 7:10:03 PM	DG
Manganese	0.02	mg/L		0.02	EPA 200.7	5/9/2011 7:10:03 PM	DG

These results apply only to the samples tested.

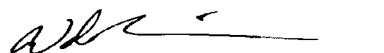
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
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Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

Page 2 of 3



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/10/2011  
**Report ID:** S1105107001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105107-001  
**ClientSample ID:** TWO2  
**COC:** 136433

**WorkOrder:** S1105107  
**CollectionDate:** 5/4/2011 3:30:00 PM  
**DateReceived:** 5/5/2011 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Beta	9.6	pCi/L		7	SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Beta Precision (±)	4.0	pCi/L			SM 7110B	5/23/2011 10:58:28 PM	SH
Lead 210	ND	pCi/L		1	OTW01	5/20/2011 11:03:40 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	5/20/2011 11:03:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	5/19/2011 4:01:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/19/2011 4:01:33 PM	SH
Radium 226	0.6	pCi/L		0.2	SM 7500-Ra B	5/17/2011 6:13:37 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	5/17/2011 6:13:37 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	5/23/2011 4:42:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	5/23/2011 4:42:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/3/2011 6:48:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/3/2011 6:48:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.2	pCi/L		1	OTW01	5/20/2011 1:39:39 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	5/20/2011 1:39:39 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	5/19/2011 5:46:25 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/19/2011 5:46:25 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	5/18/2011 1:57:07 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	5/18/2011 1:57:07 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/4/2011 8:18:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/4/2011 8:18:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105120001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105120-003  
**ClientSample ID:** TWWELL03  
**COC:** 136435

**WorkOrder:** S1105120  
**CollectionDate:** 5/5/2011 11:00:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.12	s.u.			Field	5/5/2011 11:00:00 AM
Conductivity	1467	µmhos/cm			Field	5/5/2011 11:00:00 AM
Dissolved Oxygen	1.23	mg/L			Field	5/5/2011 11:00:00 AM
Dissolved Oxygen (pct)	11.3	%			Field	5/5/2011 11:00:00 AM
Turbidity	0.91	NTU			Field	5/5/2011 11:00:00 AM
Temperature	10.6	°C			Field	5/5/2011 11:00:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	588	mg/L		5	SM 2320B	5/9/2011 6:19:59 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	642	mg/L		5	SM 2320B	5/9/2011 6:19:59 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	37	mg/L		5	SM 2320B	5/9/2011 6:19:59 PM AMB
Chloride	3	mg/L		1	EPA 300.0	5/10/2011 8:56:00 PM LK
Fluoride	1.2	mg/L		0.1	SM 4500FC	5/9/2011 6:19:59 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/16/2011 1:27:00 PM LJK
Sulfate	207	mg/L		1	EPA 300.0	5/10/2011 8:56:00 PM LK
Calcium	3	mg/L		1	EPA 200.7	5/9/2011 8:31:27 PM DG
Magnesium	1	mg/L		1	EPA 200.7	5/9/2011 8:31:27 PM DG
Potassium	4	mg/L		1	EPA 200.7	5/9/2011 8:31:27 PM DG
Sodium	379	mg/L		1	EPA 200.7	5/9/2011 8:31:27 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 12:02:00 PM MEL
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	5/9/2011 6:19:59 PM AMB
Electrical Conductivity	1350	µmhos/cm		5	SM 2510B	5/9/2011 6:19:59 PM AMB
Total Dissolved Solids (180)	990	mg/L		10	SM 2540	5/10/2011 6:40:00 PM JF
<b>Data Quality</b>						
Cation Sum	16.85	meq/L		0.01	SM 1030E	5/17/2011 11:03:39 AM KO
Anion Sum	16.20	meq/L		0.01	SM 1030E	5/17/2011 11:03:39 AM KO
Cation-Anion Balance (± 5%)	1.99	%		0.01	SM 1030E	5/17/2011 11:03:39 AM KO
Solids, Total Dissolved (Calc)	950	mg/L		10	SM 1030E	5/17/2011 11:03:39 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105120001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105120-003  
**ClientSample ID:** TWWELL03  
**COC:** 136435

**WorkOrder:** S1105120  
**CollectionDate:** 5/5/2011 11:00:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	5/9/2011 8:31:27 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:57:36 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	5/9/2011 3:57:36 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	5/9/2011 8:31:27 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	5/9/2011 3:57:36 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:31:27 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	5/9/2011 3:57:36 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	5/9/2011 8:31:27 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:57:36 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	5/12/2011 11:08:09 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:57:36 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:31:27 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	5/9/2011 3:57:36 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	5/9/2011 3:57:36 PM	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	5/9/2011 3:57:36 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	5/9/2011 3:57:36 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	5/9/2011 8:31:27 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	5/20/2011 9:10:10 PM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	5/9/2011 8:38:33 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	5/9/2011 8:38:33 PM	DG

These results apply only to the samples tested.

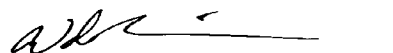
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Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 6/20/2011  
**Report ID:** S1105120001

**ProjectName:** ROSS ISR  
**Lab ID:** S1105120-003  
**ClientSample ID:** TWWELL03  
**COC:** 136435

**WorkOrder:** S1105120  
**CollectionDate:** 5/5/2011 11:00:00 AM  
**DateReceived:** 5/6/2011 2:13:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	5/23/2011 10:58:28 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	5/23/2011 10:58:28 PM	SH
Lead 210	1.2	pCi/L		1	OTW01	5/20/2011 11:03:40 AM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	5/20/2011 11:03:40 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	5/19/2011 4:01:33 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/19/2011 4:01:33 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	5/25/2011 9:54:14 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	5/25/2011 9:54:14 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	5/31/2011 2:47:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	5/31/2011 2:47:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/3/2011 8:39:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/3/2011 8:39:00 PM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	5/31/2011 7:23:34 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	5/31/2011 7:23:34 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	5/27/2011 4:22:46 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	5/27/2011 4:22:46 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	5/18/2011 4:17:32 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	5/18/2011 4:17:32 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/6/2011 12:18:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/6/2011 12:18:00 PM	SH

## These results apply only to the samples tested.

## 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

B Analyte detected in the associated Method Blank  
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Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 19XX18 Date: 9-7-11 Time: 1545

Landowner

Name: Merit Energy Company

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SESW

SEC 18

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

~~Stock~~ Industrial ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P67747W

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH 8.44

Cond. 2.95ms

Temp. °C 14.2

Turbidity (ntu) 2.24

D.O. (mg/L) 4.45/44.7

Water Level (ft): —

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): —

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear/Egg - no odor -  
7 sample bottles - 4.14

COC# 137114

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 22X-19 Date: 9-7-11 Time: 1645

**Landowner**

Name: Merit Energy company

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE NW

SEC 19

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

~~Stock~~ Industrial ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50917W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.69

Cond. 1888  $\mu$ S

Temp. °C 12.5

Turbidity (ntu) 1.30

D.O. (mg/L) 1.04 / 10.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water Clear - fizzy - no odor -  
7 sample bottles - 4.14

COC# 137114



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: DW WELLOI Date: 8-17-11 Time: 1230

**Landowner**

Name: Wood

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNW

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 8.60

Cond. 3.27ms

Temp. °C 12.1

Turbidity (ntu) 5.84

D.O. (mg/L) 1.39/13.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7  
sample bottles - 4.14

LCF  
COC# 137111

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELLO3 Date: 8-12-11 Time: 1030

**Landowner**

Name: BERGER

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 5

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7324P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.71

Cond. 1795  $\mu$ S

Temp. °C 10.0

Turbidity (ntu) 9.56

D.O. (mg/L) 0.92/8.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

COC # 137107

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELLO4 Date: 8-<sup>12</sup>11 Time: 0930

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7326P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.22

Cond. 1569  $\mu$ S

Temp. °C 9.5

Turbidity (ntu) 3.34

D.O. (mg/L) 2.14 / 20.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles - 4.14

COC # 137107

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HB WELLOS Date: 8-12-11 Time: 1100

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7430P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.62

Cond. 2.19 mS

Temp. °C 10.8

Turbidity (ntu) 117

D.O. (mg/L) 3.62/34.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly colored (rust) - no  
odor - 7 sample bottles - 4.14 - water  
turbid - Pumped for 10-15 min but would not  
clear up. Filtered clear  
COCA# 137107

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P144030W Date: 8-16-11 Time: 1400

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 23

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P144030W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.46

Cond. 883  $\mu$ S

Temp. °C 11.9

Turbidity (ntu) 1.31

D.O. (mg/L) 2.12/20.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water Clear - no odor - 7 sample  
bottles - 4.14

COC # 137108

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P17177W Date: 8-17-11 Time: 1400

**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: \_\_\_\_\_

Permit No. P17177W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.24

Cond. 900  $\mu$ S

Temp. °C 9.8

Turbidity (ntu) 18.63

D.O. (mg/L) 6.64 / 82.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7  
sample bottles - 4.14

LCF  
COC # 137111

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P22582P Date: 8-16-11 Time: 1500

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 19

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P22582P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.92

Cond. 850  $\mu$ S

Temp. °C 10.1

Turbidity (ntu) 6.24

D.O. (mg/L) 0.72 / 6.6

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

COC # 137108

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P42868W Date: 8-16-11 Time: 1300

Landowner

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NWSE

SEC 14

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P42868W

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH 8.99

Cond. 1281  $\mu$ S

Temp. °C 11.1

Turbidity (ntu) 1.49

D.O. (mg/L) 1.51 / 14.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

COC# 137108



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P50113W Date: 8-17-11 Time: 1440

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50113W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.40

Cond. 1281

Temp. °C 8.5

Turbidity (ntu) 1.21

D.O. (mg/L) 1.56 / 13.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7  
sample bottles - 4.14

LCF  
COC# 137111

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P50883W Date: 8-16-11 Time: 1540

Landowner

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NWNE

SEC 24

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50883W

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH 7.80

Cond. 718  $\mu$ S

Temp. °C 10.7

Turbidity (ntu) 53.0

D.O. (mg/L) 4.90 / 47.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water turbid - light rust colored -  
no odor - 7 sample bottles - 4.14

COC# 137108

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61006W Date: 8-16-11 Time: 1230

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWSW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61006W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.20

Cond. 1031  $\mu$ S

Temp. °C 10.8

Turbidity (ntu) 3.61

D.O. (mg/L) 0.97 / 9.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

COC# 137108

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P84665W Date: 8-17-11 Time: 1600

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWNW

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P84665W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.41

Cond. 1052

Temp. °C 10.3

Turbidity (ntu) 20.2

D.O. (mg/L) 1.55 / 14.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly turbid - no odor -  
7 sample bottles - 4.14

LCF  
COC# 137111

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SBWELLOI Date: 8-17-11 Time: 1510

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

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 9.03

Cond. 1182  $\mu$ S

Temp. °C 11.0

Turbidity (ntu) 1.07

D.O. (mg/L) 1.84 / 17.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles - 4.14

LCF  
COC # 137111

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SBWEL02 Date: 8-17-11 Time: 1330

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 1

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. —

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.78

Cond. 1020

Temp. °C 10.6

Turbidity (ntu) 1.22

D.O. (mg/L) 1.88 / 16.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC# 137111

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TWO1 Date: 8-11-11 Time: 1610

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.10

Cond. 2.64 mS

Temp. °C 14.2

Turbidity (ntu) 0.70

D.O. (mg/L) 1.26 / 12.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: TJ's house well - water clear - no  
odor - 7 sample bottles - 4.14.

COL# 137107

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TWOZ Date: 8-12-11 Time: 1130  
OSHoto Field Office

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P103666W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.00

Cond. 2.73 mS

Temp. °C 13.9

Turbidity (ntu) 1.81

D.O. (mg/L) 1.73 / 17.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7  
samples bottles - collected water from  
inside office - 4.14

CD# 137107



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TWWELL03 Date: 8-11-11 Time: 1450

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE SE

SEC 12

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P192896W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 9.06

Cond. 1490  $\mu$ S

Temp. °C 14.2

Turbidity (ntu) 6.14

D.O. (mg/L) 4.45 / 44.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles, - 4.14,

COC # 137107



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 11/1/2011  
**Report ID:** S1109162001

**ProjectName:** ROSS  
**Lab ID:** S1109162-001  
**ClientSample ID:** 19XX18  
**COC:** 137114

**WorkOrder:** S1109162  
**CollectionDate:** 9/7/2011 3:45:00 PM  
**DateReceived:** 9/8/2011 3:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.44	s.u.			Field	9/7/2011 3:45:00 PM
Conductivity	2950	µmhos/cm			Field	9/7/2011 3:45:00 PM
Dissolved Oxygen	4.45	mg/L			Field	9/7/2011 3:45:00 PM
Dissolved Oxygen (pct)	44.7	%			Field	9/7/2011 3:45:00 PM
Turbidity	2.24	NTU			Field	9/7/2011 3:45:00 PM
Temperature	14.2	°C			Field	9/7/2011 3:45:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	537	mg/L		5	SM 2320B	9/23/2011 1:17:41 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	622	mg/L		5	SM 2320B	9/23/2011 1:17:41 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	17	mg/L		5	SM 2320B	9/23/2011 1:17:41 PM AMB
Chloride	8	mg/L		1	EPA 300.0	9/20/2011 10:40:00 PM ARF
Fluoride	0.5	mg/L		0.1	SM 4500FC	9/11/2011 3:13:59 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	0.3	mg/L		0.1	EPA 353.2	9/17/2011 4:00:00 PM MEL
Sulfate	608	mg/L		1	EPA 300.0	9/20/2011 10:40:00 PM ARF
Calcium	6	mg/L		1	EPA 200.7	9/21/2011 8:38:38 PM AB
Magnesium	2	mg/L		1	EPA 200.7	9/21/2011 8:38:38 PM AB
Potassium	5	mg/L		1	EPA 200.7	9/21/2011 8:38:38 PM AB
Sodium	593	mg/L		1	EPA 200.7	9/21/2011 8:38:38 PM AB
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	9/16/2011 4:10:00 PM MEL
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	9/10/2011 2:29:16 AM AMB
Electrical Conductivity	2510	µmhos/cm		5	SM 2510B	9/10/2011 2:29:16 AM AMB
Total Dissolved Solids (180)	1650	mg/L		10	SM 2540	9/13/2011 12:30:00 PM TH
<b>Data Quality</b>						
Cation Sum	26.40	meq/L		0.01	SM 1030E	9/28/2011 8:34:16 AM KO
Anion Sum	23.68	meq/L		0.01	SM 1030E	9/28/2011 8:34:16 AM KO
Cation-Anion Balance (± 5%)	5.43	%		0.01	SM 1030E	9/28/2011 8:34:16 AM KO
Solids, Total Dissolved (Calc)	1550	mg/L		10	SM 1030E	9/28/2011 8:34:16 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 6



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 11/1/2011  
**Report ID:** S1109162001

**ProjectName:** ROSS  
**Lab ID:** S1109162-001  
**ClientSample ID:** 19XX18  
**COC:** 137114

**WorkOrder:** S1109162  
**CollectionDate:** 9/7/2011 3:45:00 PM  
**DateReceived:** 9/8/2011 3:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	9/9/2011 7:22:09 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	9/9/2011 12:56:32 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	9/9/2011 12:56:32 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	9/9/2011 7:22:09 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	9/9/2011 12:56:32 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	9/9/2011 7:22:09 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	9/9/2011 12:56:32 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	9/9/2011 7:22:09 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	9/9/2011 12:56:32 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	9/13/2011 11:47:28 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	9/9/2011 12:56:32 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	9/9/2011 7:22:09 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	9/9/2011 12:56:32 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	9/9/2011 12:56:32 PM	MS
Uranium	0.0835	mg/L		0.0003	EPA 200.8	9/9/2011 12:56:32 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	9/9/2011 12:56:32 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	9/9/2011 7:22:09 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	9/20/2011 7:19:57 PM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	9/12/2011 6:48:48 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	9/12/2011 6:48:48 PM	DG

These results apply only to the samples tested.

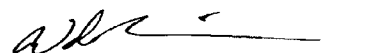
## RL - Reporting Limit

**Qualifiers:**

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- E Value above quantitation range
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Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 11/1/2011  
**Report ID:** S1109162001

**ProjectName:** ROSS  
**Lab ID:** S1109162-001  
**ClientSample ID:** 19XX18  
**COC:** 137114

**WorkOrder:** S1109162  
**CollectionDate:** 9/7/2011 3:45:00 PM  
**DateReceived:** 9/8/2011 3:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	233	pCi/L		4	SM 7110B	10/12/2011 7:57:00 PM SH
Gross Alpha Precision (±)	11	pCi/L			SM 7110B	10/12/2011 7:57:00 PM SH
Gross Beta	72.1	pCi/L		7	SM 7110B	10/12/2011 7:57:00 PM SH
Gross Beta Precision (±)	5.5	pCi/L			SM 7110B	10/12/2011 7:57:00 PM SH
Lead 210	13.4	pCi/L		1	OTW01	10/17/2011 12:40:00 PM SH
Lead 210 Precision (±)	0.8	pCi/L			OTW01	10/17/2011 12:40:00 PM SH
Polonium 210	1.1	pCi/L		1	OTW01	10/17/2011 12:40:00 PM SH
Polonium 210 Precision (±)	0.7	pCi/L			OTW01	10/17/2011 12:40:00 PM SH
Radium 226	35.6	pCi/L		0.2	SM 7500-Ra B	9/28/2011 9:29:00 AM SH
Radium 226 Precision (±)	0.7	pCi/L			SM 7500-Ra B	9/28/2011 9:29:00 AM SH
Radium 228	ND	pCi/L		1	Ra-05	10/28/2011 5:04:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	10/28/2011 5:04:00 PM SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/20/2011 8:45:00 AM WL
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/20/2011 8:45:00 AM WL
<b>Radionuclides - Suspended</b>						
Lead 210	3.4	pCi/L		1	OTW01	10/11/2011 4:16:00 PM SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	10/11/2011 4:16:00 PM SH
Polonium 210	5.1	pCi/L		1	OTW01	10/11/2011 12:40:00 PM SH
Polonium 210 Precision (±)	1.4	pCi/L			OTW01	10/11/2011 12:40:00 PM SH
Radium 226	0.7	pCi/L		0.2	SM 7500-Ra B	10/3/2011 6:27:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	10/3/2011 6:27:00 PM SH
Thorium 230	0.2	pCi/L		0.2	ACW10	10/20/2011 8:45:00 AM WL
Thorium 230 Precision (±)	0.1	pCi/L			ACW10	10/20/2011 8:45:00 AM WL

## These results apply only to the samples tested.


## RL - Reporting Limit

**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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 11/1/2011  
**Report ID:** S1109162001

**ProjectName:** ROSS  
**Lab ID:** S1109162-002  
**ClientSample ID:** 22X-19  
**COC:** 137114

**WorkOrder:** S1109162  
**CollectionDate:** 9/7/2011 4:45:00 PM  
**DateReceived:** 9/8/2011 3:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.69	s.u.			Field	9/7/2011 4:45:00 PM
Conductivity	1888	µmhos/cm			Field	9/7/2011 4:45:00 PM
Dissolved Oxygen	1.04	mg/L			Field	9/7/2011 4:45:00 PM
Dissolved Oxygen (pct)	10.4	%			Field	9/7/2011 4:45:00 PM
Turbidity	1.30	NTU			Field	9/7/2011 4:45:00 PM
Temperature	12.5	°C			Field	9/7/2011 4:45:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	469	mg/L		5	SM 2320B	9/10/2011 2:39:54 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	515	mg/L		5	SM 2320B	9/10/2011 2:39:54 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	28	mg/L		5	SM 2320B	9/10/2011 2:39:54 AM AMB
Chloride	11	mg/L		1	EPA 300.0	9/20/2011 9:57:30 AM KO
Fluoride	0.6	mg/L		0.1	SM 4500FC	9/11/2011 3:17:28 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	9/17/2011 4:01:00 PM MEL
Sulfate	517	mg/L		1	EPA 300.0	9/20/2011 9:57:30 AM KO
Calcium	5	mg/L		1	EPA 200.7	9/21/2011 8:41:03 PM AB
Magnesium	1	mg/L		1	EPA 200.7	9/21/2011 8:41:03 PM AB
Potassium	4	mg/L		1	EPA 200.7	9/21/2011 8:41:03 PM AB
Sodium	506	mg/L		1	EPA 200.7	9/21/2011 8:41:03 PM AB
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	9/16/2011 4:11:00 PM MEL
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	9/10/2011 2:39:54 AM AMB
Electrical Conductivity	2180	µmhos/cm		5	SM 2510B	9/10/2011 2:39:54 AM AMB
Total Dissolved Solids (180)	1390	mg/L		10	SM 2540	9/13/2011 12:35:00 PM TH
<b>Data Quality</b>						
Cation Sum	22.44	meq/L		0.01	SM 1030E	9/28/2011 8:34:16 AM KO
Anion Sum	20.48	meq/L		0.01	SM 1030E	9/28/2011 8:34:16 AM KO
Cation-Anion Balance (± 5%)	4.54	%		0.01	SM 1030E	9/28/2011 8:34:16 AM KO
Solids, Total Dissolved (Calc)	1330	mg/L		10	SM 1030E	9/28/2011 8:34:16 AM KO

## These results apply only to the samples tested.

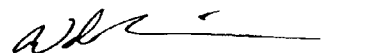
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

Page 4 of 6



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 11/1/2011  
**Report ID:** S1109162001

**ProjectName:** ROSS  
**Lab ID:** S1109162-002  
**ClientSample ID:** 22X-19  
**COC:** 137114

**WorkOrder:** S1109162  
**CollectionDate:** 9/7/2011 4:45:00 PM  
**DateReceived:** 9/8/2011 3:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	9/9/2011 7:26:54 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	9/9/2011 1:00:30 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	9/9/2011 1:00:30 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	9/9/2011 7:26:54 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	9/9/2011 1:00:30 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	9/9/2011 7:26:54 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	9/9/2011 1:00:30 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	9/9/2011 7:26:54 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	9/9/2011 1:00:30 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	9/13/2011 11:49:14 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	9/9/2011 1:00:30 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	9/9/2011 7:26:54 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	9/9/2011 1:00:30 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	9/9/2011 1:00:30 PM	MS
Uranium	0.0160	mg/L		0.0003	EPA 200.8	9/9/2011 1:00:30 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	9/9/2011 1:00:30 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	9/9/2011 7:26:54 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	9/20/2011 7:23:57 PM	MS
<b>Metals - Total</b>							
Iron	0.05	mg/L		0.05	EPA 200.7	9/12/2011 6:51:11 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	9/12/2011 6:51:11 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

Page 5 of 6



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 11/1/2011  
**Report ID:** S1109162001

**ProjectName:** ROSS  
**Lab ID:** S1109162-002  
**ClientSample ID:** 22X-19  
**COC:** 137114

**WorkOrder:** S1109162  
**CollectionDate:** 9/7/2011 4:45:00 PM  
**DateReceived:** 9/8/2011 3:12:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	48.2	pCi/L		5	SM 7110B	10/12/2011 7:57:00 PM	SH
Gross Alpha Precision (±)	5.7	pCi/L			SM 7110B	10/12/2011 7:57:00 PM	SH
Gross Beta	12.0	pCi/L		7	SM 7110B	10/12/2011 7:57:00 PM	SH
Gross Beta Precision (±)	4.4	pCi/L			SM 7110B	10/12/2011 7:57:00 PM	SH
Lead 210	3.0	pCi/L		1	OTW01	10/17/2011 12:40:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/17/2011 12:40:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	10/17/2011 12:40:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/17/2011 12:40:00 PM	SH
Radium 226	3.1	pCi/L		0.2	SM 7500-Ra B	9/28/2011 9:29:00 AM	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500-Ra B	9/28/2011 9:29:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	10/28/2011 5:04:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	10/28/2011 5:04:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/20/2011 8:45:00 AM	WL
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/20/2011 8:45:00 AM	WL
<b>Radionuclides - Suspended</b>							
Lead 210	1.8	pCi/L		1	OTW01	10/11/2011 4:16:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/11/2011 4:16:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2011 12:40:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2011 12:40:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	10/3/2011 6:27:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	10/3/2011 6:27:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/20/2011 8:45:00 AM	WL
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/20/2011 8:45:00 AM	WL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-001  
**ClientSample ID:** DW WELL01  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 12:30:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.60	s.u.			Field	8/17/2011 12:30:00 PM
Conductivity	3270	µmhos/cm			Field	8/17/2011 12:30:00 PM
Dissolved Oxygen	1.39	mg/L			Field	8/17/2011 12:30:00 PM
Dissolved Oxygen (pct)	13.2	%			Field	8/17/2011 12:30:00 PM
Turbidity	5.84	NTU			Field	8/17/2011 12:30:00 PM
Temperature	12.1	°C			Field	8/17/2011 12:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	600	mg/L		5	SM 2320B	8/19/2011 10:55:08 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	685	mg/L		5	SM 2320B	8/19/2011 10:55:08 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	23	mg/L		5	SM 2320B	8/19/2011 10:55:08 PM AMB
Chloride	9	mg/L		1	EPA 300.0	8/22/2011 2:31:00 PM ARF
Fluoride	0.5	mg/L		0.1	SM 4500FC	8/22/2011 4:00:29 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/25/2011 3:21:00 PM MEL
Sulfate	711	mg/L		1	EPA 300.0	8/22/2011 2:31:00 PM ARF
Calcium	16	mg/L		1	EPA 200.7	8/19/2011 3:32:19 PM DG
Magnesium	6	mg/L		1	EPA 200.7	8/19/2011 3:32:19 PM DG
Potassium	13	mg/L		1	EPA 200.7	8/19/2011 3:32:19 PM DG
Sodium	612	mg/L		1	EPA 200.7	8/19/2011 3:32:19 PM DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	8/29/2011 3:27:00 PM MEL
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	8/19/2011 10:55:08 PM AMB
Electrical Conductivity	2790	µmhos/cm		5	SM 2510B	8/19/2011 10:55:08 PM AMB
Total Dissolved Solids (180)	1770	mg/L		10	SM 2540	8/19/2011 11:45:00 AM JF
<b>Data Quality</b>						
Cation Sum	28.21	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Anion Sum	27.07	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Cation-Anion Balance (± 5%)	2.07	%		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Solids, Total Dissolved (Calc)	1730	mg/L		10	SM 1030E	9/8/2011 9:15:32 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-001  
**ClientSample ID:** DW WELL01  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 12:30:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:32:19 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:33:30 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 9:33:30 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	8/19/2011 3:32:19 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 9:33:30 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:32:19 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 9:33:30 PM	MS
Iron	0.22	mg/L		0.05	EPA 200.7	8/19/2011 3:32:19 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:33:30 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/31/2011 1:38:01 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:33:30 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:32:19 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:33:30 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 9:33:30 PM	MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	8/23/2011 9:33:30 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:33:30 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:32:19 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/30/2011 9:53:23 AM	MS
<b>Metals - Total</b>							
Iron	1.48	mg/L		0.05	EPA 200.7	8/23/2011 3:02:15 PM	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	8/23/2011 3:02:15 PM	DG

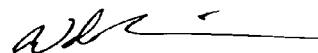
## These results apply only to the samples tested.

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-001  
**ClientSample ID:** DW WELL01  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 12:30:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta	8.5	pCi/L		7	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Lead 210	ND	pCi/L		1	OTW01	9/21/2011 12:14:00 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 12:14:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 8:56:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 8:56:00 AM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/20/2011 4:59:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/20/2011 4:59:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/23/2011 9:09:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/23/2011 9:09:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.8	pCi/L		1	OTW01	10/4/2011 3:52:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/4/2011 3:52:00 PM	SH
Polonium 210	1.9	pCi/L		1	OTW01	10/4/2011 12:15:00 PM	SH
Polonium 210 Precision (±)	0.6	pCi/L			OTW01	10/4/2011 12:15:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/22/2011 9:48:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/22/2011 9:48:00 AM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-004  
**ClientSample ID:** HBWELL03  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 10:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.71	s.u.			Field	8/12/2011 10:30:00 AM
Conductivity	1795	µmhos/cm			Field	8/12/2011 10:30:00 AM
Dissolved Oxygen	0.92	mg/L			Field	8/12/2011 10:30:00 AM
Dissolved Oxygen (pct)	8.4	%			Field	8/12/2011 10:30:00 AM
Turbidity	9.56	NTU			Field	8/12/2011 10:30:00 AM
Temperature	10.0	°C			Field	8/12/2011 10:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	503	mg/L		5	SM 2320B	8/15/2011 9:56:21 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	614	mg/L		5	SM 2320B	8/15/2011 9:56:21 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/15/2011 9:56:21 PM AMB
Chloride	14	mg/L		1	EPA 300.0	8/15/2011 11:58:00 PM ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	8/15/2011 9:56:21 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/17/2011 2:24:00 PM MEL
Sulfate	490	mg/L		1	EPA 300.0	8/15/2011 11:58:00 PM ARF
Calcium	96	mg/L		1	EPA 200.7	8/19/2011 1:23:01 PM DG
Magnesium	50	mg/L		1	EPA 200.7	8/19/2011 1:23:01 PM DG
Potassium	19	mg/L		1	EPA 200.7	8/19/2011 1:23:01 PM DG
Sodium	294	mg/L		1	EPA 200.7	8/19/2011 1:23:01 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/16/2011 4:57:00 PM MEL
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	8/15/2011 9:56:21 PM AMB
Electrical Conductivity	1980	µmhos/cm		5	SM 2510B	8/15/2011 9:56:21 PM AMB
Total Dissolved Solids (180)	1350	mg/L		10	SM 2540	8/16/2011 1:55:00 PM JF
<b>Data Quality</b>						
Cation Sum	22.19	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Anion Sum	20.65	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Cation-Anion Balance (± 5%)	3.60	%		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Solids, Total Dissolved (Calc)	1260	mg/L		10	SM 1030E	8/22/2011 1:09:54 PM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-004  
**ClientSample ID:** HBWELL03  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 10:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/16/2011 2:02:57 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:32:39 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/15/2011 4:32:39 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	8/16/2011 2:02:57 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/15/2011 4:32:39 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:02:57 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/15/2011 4:32:39 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/16/2011 2:02:57 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:32:39 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/17/2011 10:23:09 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:32:39 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:02:57 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:32:39 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/15/2011 4:32:39 PM	MS
Uranium	0.0033	mg/L		0.0003	EPA 200.8	8/15/2011 4:32:39 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:32:39 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:02:57 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 10:25:43 AM	MS
<b>Metals - Total</b>							
Iron	5.22	mg/L		0.05	EPA 200.7	8/18/2011 2:58:22 PM	DG
Manganese	0.25	mg/L		0.02	EPA 200.7	8/18/2011 2:58:22 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-004  
**ClientSample ID:** HBWELL03  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 10:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	5.6	pCi/L		3	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Alpha Precision (±)	2.4	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta	13.4	pCi/L		7	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Lead 210	ND	pCi/L		1	OTW01	9/2/2011 4:26:02 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 4:26:02 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/2/2011 11:54:03 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 11:54:03 AM	SH
Radium 226	0.5	pCi/L		0.2	SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/16/2011 4:46:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/16/2011 4:46:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	8/29/2011 9:37:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	8/29/2011 9:37:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.1	pCi/L		1	OTW01	9/9/2011 9:13:47 AM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	9/9/2011 9:13:47 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/8/2011 2:23:46 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/8/2011 2:23:46 PM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/1/2011 1:47:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/1/2011 1:47:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-003  
**ClientSample ID:** HBWELL04  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 9:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.22	s.u.			Field	8/12/2011 9:30:00 AM
Conductivity	1569	µmhos/cm			Field	8/12/2011 9:30:00 AM
Dissolved Oxygen	2.14	mg/L			Field	8/12/2011 9:30:00 AM
Dissolved Oxygen (pct)	20.1	%			Field	8/12/2011 9:30:00 AM
Turbidity	3.34	NTU			Field	8/12/2011 9:30:00 AM
Temperature	9.5	°C			Field	8/12/2011 9:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	361	mg/L		5	SM 2320B	8/15/2011 9:35:42 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	441	mg/L		5	SM 2320B	8/15/2011 9:35:42 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/15/2011 9:35:42 PM AMB
Chloride	15	mg/L		1	EPA 300.0	8/15/2011 11:44:00 PM ARF
Fluoride	0.2	mg/L		0.1	SM 4500FC	8/15/2011 9:35:42 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	0.8	mg/L		0.1	EPA 353.2	8/17/2011 2:18:00 PM MEL
Sulfate	587	mg/L		1	EPA 300.0	8/15/2011 11:44:00 PM ARF
Calcium	201	mg/L		1	EPA 200.7	8/16/2011 2:00:38 PM DG
Magnesium	58	mg/L		1	EPA 200.7	8/16/2011 2:00:38 PM DG
Potassium	8	mg/L		1	EPA 200.7	8/16/2011 2:00:38 PM DG
Sodium	137	mg/L		1	EPA 200.7	8/16/2011 2:00:38 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/16/2011 3:21:00 PM MEL
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	8/15/2011 9:35:42 PM AMB
Electrical Conductivity	1800	µmhos/cm		5	SM 2510B	8/15/2011 9:35:42 PM AMB
Total Dissolved Solids (180)	1350	mg/L		10	SM 2540	8/16/2011 1:50:00 PM JF
<b>Data Quality</b>						
Cation Sum	20.98	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Anion Sum	19.92	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Cation-Anion Balance (± 5%)	2.59	%		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Solids, Total Dissolved (Calc)	1230	mg/L		10	SM 1030E	8/22/2011 1:09:54 PM KO

These results apply only to the samples tested.

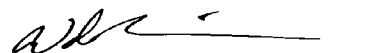
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Ave  
Sheridan, WY 82801

**Date Reported:** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-003  
**ClientSample ID:** HBWELL04  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 9:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/16/2011 2:00:38 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:28:37 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/15/2011 4:28:37 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	8/16/2011 2:00:38 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/15/2011 4:28:37 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:00:38 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/15/2011 4:28:37 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/16/2011 2:00:38 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:28:37 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/17/2011 10:21:23 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:28:37 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:00:38 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:28:37 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/15/2011 4:28:37 PM	MS
Uranium	0.0291	mg/L		0.0003	EPA 200.8	8/15/2011 4:28:37 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:28:37 PM	MS
Zinc	0.07	mg/L		0.01	EPA 200.7	8/16/2011 2:00:38 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 10:23:04 AM	MS
<b>Metals - Total</b>							
Iron	0.87	mg/L		0.05	EPA 200.7	8/19/2011 4:27:59 PM	DG
Manganese	0.08	mg/L		0.02	EPA 200.7	8/18/2011 2:53:45 PM	DG

## These results apply only to the samples tested.

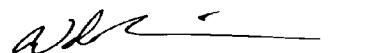
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-003  
**ClientSample ID:** HBWELL04  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 9:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	19.6	pCi/L		3	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Alpha Precision (±)	3.6	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta	14.4	pCi/L		7	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta Precision (±)	4.4	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Lead 210	1.2	pCi/L		1	OTW01	9/2/2011 4:26:02 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	9/2/2011 4:26:02 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/2/2011 11:54:03 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 11:54:03 AM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 228	1.2	pCi/L		1	Ra-05	9/16/2011 4:46:00 PM	SH
Radium 228 Precision (±)	1.0	pCi/L			Ra-05	9/16/2011 4:46:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	8/29/2011 9:37:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	8/29/2011 9:37:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	9/8/2011 5:30:44 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/8/2011 5:30:44 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/8/2011 11:58:20 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/8/2011 11:58:20 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/1/2011 1:47:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/1/2011 1:47:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-005  
**ClientSample ID:** HBWELL05  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 11:00:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.62	s.u.			Field	8/12/2011 11:00:00 AM
Conductivity	2190	µmhos/cm			Field	8/12/2011 11:00:00 AM
Dissolved Oxygen	3.62	mg/L			Field	8/12/2011 11:00:00 AM
Dissolved Oxygen (pct)	34.3	%			Field	8/12/2011 11:00:00 AM
Turbidity	117	NTU			Field	8/12/2011 11:00:00 AM
Temperature	10.8	°C			Field	8/12/2011 11:00:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	536	mg/L		5	SM 2320B	8/15/2011 10:07:37 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	653	mg/L		5	SM 2320B	8/15/2011 10:07:37 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/15/2011 10:07:37 PM AMB
Chloride	5	mg/L		1	EPA 300.0	8/16/2011 12:11:00 AM ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	8/15/2011 10:07:37 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/17/2011 2:25:00 PM MEL
Sulfate	392	mg/L		1	EPA 300.0	8/16/2011 12:11:00 AM ARF
Calcium	83	mg/L		1	EPA 200.7	8/19/2011 1:25:19 PM DG
Magnesium	34	mg/L		1	EPA 200.7	8/19/2011 1:25:19 PM DG
Potassium	10	mg/L		1	EPA 200.7	8/19/2011 1:25:19 PM DG
Sodium	294	mg/L		1	EPA 200.7	8/19/2011 1:25:19 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/16/2011 4:58:00 PM MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	8/15/2011 10:07:37 PM AMB
Electrical Conductivity	1820	µmhos/cm		5	SM 2510B	8/15/2011 10:07:37 PM AMB
Total Dissolved Solids (180)	1200	mg/L		10	SM 2540	8/16/2011 2:05:00 PM JF
<b>Data Quality</b>						
Cation Sum	19.96	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Anion Sum	19.03	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Cation-Anion Balance (± 5%)	2.38	%		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Solids, Total Dissolved (Calc)	1140	mg/L		10	SM 1030E	8/22/2011 1:09:54 PM KO

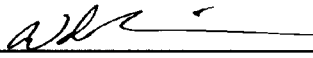
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-005  
**ClientSample ID:** HBWELL05  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 11:00:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/16/2011 2:05:15 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:44:42 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/15/2011 4:44:42 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	8/16/2011 2:05:15 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/15/2011 4:44:42 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:05:15 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/15/2011 4:44:42 PM	MS
Iron	0.29	mg/L		0.05	EPA 200.7	8/16/2011 2:05:15 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:44:42 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/17/2011 10:24:55 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:44:42 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:05:15 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:44:42 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/15/2011 4:44:42 PM	MS
Uranium	0.0108	mg/L		0.0003	EPA 200.8	8/15/2011 4:44:42 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:44:42 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:05:15 PM	DG
<b>Metals - Suspended</b>							
Uranium	0.0029	mg/L		0.0003	EPA 200.8	8/28/2011 10:33:44 AM	MS
<b>Metals - Total</b>							
Iron	47.6	mg/L		0.05	EPA 200.7	8/18/2011 3:05:15 PM	DG
Manganese	0.09	mg/L		0.02	EPA 200.7	8/18/2011 3:05:15 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-005  
**ClientSample ID:** HBWELL05  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 11:00:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	10.0	pCi/L		3	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Alpha Precision (±)	2.8	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta	7.4	pCi/L		7	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Lead 210	1.0	pCi/L		1	OTW01	9/2/2011 4:26:02 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	9/2/2011 4:26:02 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/2/2011 11:54:03 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 11:54:03 AM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/16/2011 4:46:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/16/2011 4:46:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	8/29/2011 9:37:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	8/29/2011 9:37:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	6.8	pCi/L		1	OTW01	9/9/2011 9:13:47 AM	SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	9/9/2011 9:13:47 AM	SH
Polonium 210	1.5	pCi/L		1	OTW01	9/8/2011 2:23:46 PM	SH
Polonium 210 Precision (±)	0.5	pCi/L			OTW01	9/8/2011 2:23:46 PM	SH
Radium 226	1.2	pCi/L		0.2	SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/1/2011 1:47:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/1/2011 1:47:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-003  
**ClientSample ID:** P144030W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 2:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.46	s.u.			Field	8/16/2011 2:00:00 PM
Conductivity	883	µmhos/cm			Field	8/16/2011 2:00:00 PM
Dissolved Oxygen	2.12	mg/L			Field	8/16/2011 2:00:00 PM
Dissolved Oxygen (pct)	20.5	%			Field	8/16/2011 2:00:00 PM
Turbidity	1.31	NTU			Field	8/16/2011 2:00:00 PM
Temperature	11.9	°C			Field	8/16/2011 2:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	438	mg/L		5	SM 2320B	8/18/2011 10:16:39 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	534	mg/L		5	SM 2320B	8/18/2011 10:16:39 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/18/2011 10:16:39 PM KO
Chloride	2	mg/L		1	EPA 300.0	8/19/2011 7:31:00 PM ARF
Fluoride	0.2	mg/L		0.1	SM 4500FC	8/18/2011 10:16:39 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/18/2011 4:08:00 PM MEL
Sulfate	55	mg/L		1	EPA 300.0	8/19/2011 7:31:00 PM ARF
Calcium	45	mg/L		1	EPA 200.7	8/18/2011 5:31:01 PM DG
Magnesium	23	mg/L		1	EPA 200.7	8/18/2011 5:31:01 PM DG
Potassium	16	mg/L		1	EPA 200.7	8/18/2011 5:31:01 PM DG
Sodium	121	mg/L		1	EPA 200.7	8/18/2011 5:31:01 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 2:41:00 PM MEL
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	8/18/2011 10:16:39 PM KO
Electrical Conductivity	934	µmhos/cm		5	SM 2510B	8/18/2011 10:16:39 PM KO
Total Dissolved Solids (180)	510	mg/L		10	SM 2540	8/19/2011 10:00:00 AM JF
<b>Data Quality</b>						
Cation Sum	9.83	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Anion Sum	9.94	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Cation-Anion Balance (± 5%)	0.57	%		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Solids, Total Dissolved (Calc)	520	mg/L		10	SM 1030E	8/25/2011 8:53:25 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-003  
**ClientSample ID:** P144030W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 2:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/18/2011 5:31:01 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:29:32 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 5:29:32 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	8/18/2011 5:31:01 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 5:29:32 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:31:01 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 5:29:32 PM	MS
Iron	0.33	mg/L		0.05	EPA 200.7	8/18/2011 5:31:01 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:29:32 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/26/2011 3:45:41 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:29:32 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:31:01 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:29:32 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 5:29:32 PM	MS
Uranium	0.0274	mg/L		0.0003	EPA 200.8	8/23/2011 5:29:32 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:29:32 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:31:01 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 11:32:27 AM	MS
<b>Metals - Total</b>							
Iron	0.38	mg/L		0.05	EPA 200.7	8/22/2011 10:28:54 PM	DG
Manganese	0.08	mg/L		0.02	EPA 200.7	8/22/2011 10:28:54 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-003  
**ClientSample ID:** P144030W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 2:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	20.4	pCi/L		2	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Alpha Precision (±)	2.5	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta	17.2	pCi/L		4	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Lead 210	1.3	pCi/L		1	OTW01	9/21/2011 12:14:00 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	9/21/2011 12:14:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 8:56:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 8:56:00 AM	SH
Radium 226	0.9	pCi/L		0.2	SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/19/2011 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/19/2011 5:54:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/13/2011 9:06:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/13/2011 9:06:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	9/22/2011 1:59:00 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/22/2011 1:59:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/22/2011 10:00:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/22/2011 10:00:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/14/2011 11:31:07 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/14/2011 11:31:07 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH

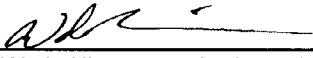
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-003  
**ClientSample ID:** P17177W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 2:00:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.24	s.u.			Field	8/17/2011 2:00:00 PM
Conductivity	900	µmhos/cm			Field	8/17/2011 2:00:00 PM
Dissolved Oxygen	6.64	mg/L			Field	8/17/2011 2:00:00 PM
Dissolved Oxygen (pct)	82.7	%			Field	8/17/2011 2:00:00 PM
Turbidity	18.63	NTU			Field	8/17/2011 2:00:00 PM
Temperature	9.8	°C			Field	8/17/2011 2:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	322	mg/L		5	SM 2320B	8/26/2011 4:42:33 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	395	mg/L		5	SM 2320B	8/19/2011 11:28:03 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/26/2011 4:42:33 PM AMB
Chloride	26	mg/L		1	EPA 300.0	8/30/2011 12:11:00 AM ARF
Fluoride	ND	mg/L		0.1	SM 4500FC	8/22/2011 4:06:59 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	16.3	mg/L		0.1	EPA 353.2	8/31/2011 4:37:00 PM LJK
Sulfate	39	mg/L		1	EPA 300.0	8/30/2011 12:11:00 AM ARF
Calcium	98	mg/L		1	EPA 200.7	8/19/2011 3:48:32 PM DG
Magnesium	26	mg/L		1	EPA 200.7	8/19/2011 3:48:32 PM DG
Potassium	5	mg/L		1	EPA 200.7	8/19/2011 3:48:32 PM DG
Sodium	42	mg/L		1	EPA 200.7	8/19/2011 3:48:32 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 3:29:00 PM MEL
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	8/19/2011 11:28:03 PM AMB
Electrical Conductivity	944	µmhos/cm		5	SM 2510B	8/19/2011 11:28:03 PM AMB
Total Dissolved Solids (180)	550	mg/L		10	SM 2540	8/19/2011 11:55:00 AM JF
<b>Data Quality</b>						
Cation Sum	8.99	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Anion Sum	9.14	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Cation-Anion Balance (± 5%)	0.86	%		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Solids, Total Dissolved (Calc)	500	mg/L		10	SM 1030E	9/8/2011 9:15:32 AM KO

These results apply only to the samples tested.

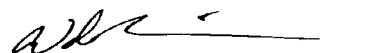
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-003  
**ClientSample ID:** P17177W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 2:00:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:48:32 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:49:28 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 9:49:28 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:48:32 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 9:49:28 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:48:32 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 9:49:28 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/19/2011 3:48:32 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:49:28 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/31/2011 1:41:34 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:49:28 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:48:32 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:49:28 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 9:49:28 PM	MS
Uranium	0.0230	mg/L		0.0003	EPA 200.8	8/23/2011 9:49:28 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:49:28 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:48:32 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/30/2011 10:04:05 AM	MS
<b>Metals - Total</b>							
Iron	1.54	mg/L		0.05	EPA 200.7	8/23/2011 3:13:52 PM	DG
Manganese	0.13	mg/L		0.02	EPA 200.7	8/23/2011 3:13:52 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-003  
**ClientSample ID:** P17177W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 2:00:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	11.6	pCi/L		2	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta	4.1	pCi/L		4	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Lead 210	ND	pCi/L		1	OTW01	9/21/2011 3:31:03 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 3:31:03 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 10:50:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 10:50:00 AM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/20/2011 4:59:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/20/2011 4:59:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.8	pCi/L		1	OTW01	10/4/2011 3:52:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/4/2011 3:52:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	10/4/2011 12:15:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/4/2011 12:15:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/22/2011 2:07:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/22/2011 2:07:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-004  
**ClientSample ID:** P22582P  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 3:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.92	s.u.			Field	8/16/2011 3:00:00 PM
Conductivity	850	µmhos/cm			Field	8/16/2011 3:00:00 PM
Dissolved Oxygen	0.72	mg/L			Field	8/16/2011 3:00:00 PM
Dissolved Oxygen (pct)	6.6	%			Field	8/16/2011 3:00:00 PM
Turbidity	6.24	NTU			Field	8/16/2011 3:00:00 PM
Temperature	10.1	°C			Field	8/16/2011 3:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	378	mg/L		5	SM 2320B	8/18/2011 10:38:43 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	448	mg/L		5	SM 2320B	8/18/2011 10:38:43 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	7	mg/L		5	SM 2320B	8/18/2011 10:38:43 PM KO
Chloride	6	mg/L		1	EPA 300.0	8/19/2011 7:43:00 PM ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	8/19/2011 5:18:02 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/18/2011 4:09:00 PM MEL
Sulfate	60	mg/L		1	EPA 300.0	8/19/2011 7:43:00 PM ARF
Calcium	24	mg/L		1	EPA 200.7	8/18/2011 5:44:59 PM DG
Magnesium	12	mg/L		1	EPA 200.7	8/18/2011 5:44:59 PM DG
Potassium	7	mg/L		1	EPA 200.7	8/18/2011 5:44:59 PM DG
Sodium	159	mg/L		1	EPA 200.7	8/18/2011 5:44:59 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 2:42:00 PM MEL
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	8/18/2011 10:38:43 PM KO
Electrical Conductivity	881	µmhos/cm		5	SM 2510B	8/18/2011 10:38:43 PM KO
Total Dissolved Solids (180)	500	mg/L		10	SM 2540	8/19/2011 10:05:00 AM JF
<b>Data Quality</b>						
Cation Sum	9.21	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Anion Sum	9.01	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Cation-Anion Balance (± 5%)	1.10	%		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Solids, Total Dissolved (Calc)	500	mg/L		10	SM 1030E	8/25/2011 8:53:25 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-004  
**ClientSample ID:** P22582P  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 3:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/18/2011 5:44:59 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:33:32 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 5:33:32 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	8/18/2011 5:44:59 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 5:33:32 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:44:59 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 5:33:32 PM	MS
Iron	0.80	mg/L		0.05	EPA 200.7	8/18/2011 5:44:59 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:33:32 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/26/2011 3:47:27 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:33:32 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:44:59 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:33:32 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 5:33:32 PM	MS
Uranium	0.0040	mg/L		0.0003	EPA 200.8	8/23/2011 5:33:32 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:33:32 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:44:59 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 11:35:07 AM	MS
<b>Metals - Total</b>							
Iron	1.57	mg/L		0.05	EPA 200.7	8/22/2011 10:31:18 PM	DG
Manganese	0.04	mg/L		0.02	EPA 200.7	8/22/2011 10:31:18 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-004  
**ClientSample ID:** P22582P  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 3:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.9	pCi/L		2	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta	4.7	pCi/L		4	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Lead 210	1.1	pCi/L		1	OTW01	9/21/2011 12:14:00 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	9/21/2011 12:14:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 8:56:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 8:56:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/19/2011 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/19/2011 5:54:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/12/2011 9:07:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/12/2011 9:07:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	3.6	pCi/L		1	OTW01	9/22/2011 1:59:00 PM	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	9/22/2011 1:59:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/22/2011 10:00:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/22/2011 10:00:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/14/2011 11:31:07 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/14/2011 11:31:07 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/23/2011 1:37:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/23/2011 1:37:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-002  
**ClientSample ID:** P42868W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 1:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.99	s.u.			Field	8/16/2011 1:00:00 PM
Conductivity	1281	µmhos/cm			Field	8/16/2011 1:00:00 PM
Dissolved Oxygen	1.51	mg/L			Field	8/16/2011 1:00:00 PM
Dissolved Oxygen (pct)	14.2	%			Field	8/16/2011 1:00:00 PM
Turbidity	1.49	NTU			Field	8/16/2011 1:00:00 PM
Temperature	11.1	°C			Field	8/16/2011 1:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	558	mg/L		5	SM 2320B	8/18/2011 10:06:25 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	623	mg/L		5	SM 2320B	8/18/2011 10:06:25 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	29	mg/L		5	SM 2320B	8/18/2011 10:06:25 PM KO
Chloride	2	mg/L		1	EPA 300.0	8/19/2011 7:20:00 PM ARF
Fluoride	0.2	mg/L		0.1	SM 4500FC	8/18/2011 10:06:25 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/18/2011 4:07:00 PM MEL
Sulfate	116	mg/L		1	EPA 300.0	8/19/2011 7:20:00 PM ARF
Calcium	2	mg/L		1	EPA 200.7	8/18/2011 5:26:21 PM DG
Magnesium	1	mg/L		1	EPA 200.7	8/18/2011 5:26:21 PM DG
Potassium	4	mg/L		1	EPA 200.7	8/18/2011 5:26:21 PM DG
Sodium	329	mg/L		1	EPA 200.7	8/18/2011 5:26:21 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 2:40:00 PM MEL
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	8/18/2011 10:06:25 PM KO
Electrical Conductivity	1370	µmhos/cm		5	SM 2510B	8/18/2011 10:06:25 PM KO
Total Dissolved Solids (180)	790	mg/L		10	SM 2540	8/19/2011 9:55:00 AM JF
<b>Data Quality</b>						
Cation Sum	14.62	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Anion Sum	13.63	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Cation-Anion Balance (± 5%)	3.50	%		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Solids, Total Dissolved (Calc)	790	mg/L		10	SM 1030E	8/25/2011 8:53:25 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-002  
**ClientSample ID:** P42868W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 1:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/18/2011 5:26:21 PM	DG
Arsenic	0.016	mg/L		0.005	EPA 200.8	8/23/2011 5:25:32 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 5:25:32 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	8/18/2011 5:26:21 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 5:25:32 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:26:21 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 5:25:32 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/18/2011 5:26:21 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:25:32 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/26/2011 3:43:55 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:25:32 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:26:21 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:25:32 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 5:25:32 PM	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	8/23/2011 5:25:32 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:25:32 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:26:21 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 11:21:45 AM	MS
<b>Metals - Total</b>							
Iron	0.08	mg/L		0.05	EPA 200.7	8/22/2011 10:26:31 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	8/22/2011 10:26:31 PM	DG

## These results apply only to the samples tested.

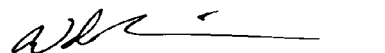
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported:** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-002  
**ClientSample ID:** P42868W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 1:00:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Lead 210	ND	pCi/L		1	OTW01	9/21/2011 12:14:00 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 12:14:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 8:56:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 8:56:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/19/2011 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/19/2011 5:54:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/13/2011 9:06:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/13/2011 9:06:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	9/22/2011 1:59:00 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/22/2011 1:59:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/22/2011 10:00:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/22/2011 10:00:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/13/2011 12:43:56 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/13/2011 12:43:56 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH

## These results apply only to the samples tested.

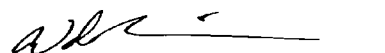
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-004  
**ClientSample ID:** P50113W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 2:40:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.40	s.u.			Field	8/17/2011 2:40:00 PM
Conductivity	1281	µmhos/cm			Field	8/17/2011 2:40:00 PM
Dissolved Oxygen	1.56	mg/L			Field	8/17/2011 2:40:00 PM
Dissolved Oxygen (pct)	13.9	%			Field	8/17/2011 2:40:00 PM
Turbidity	1.21	NTU			Field	8/17/2011 2:40:00 PM
Temperature	8.5	°C			Field	8/17/2011 2:40:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	527	mg/L		5	SM 2320B	8/19/2011 11:38:59 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	642	mg/L		5	SM 2320B	8/19/2011 11:38:59 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/19/2011 11:38:59 PM AMB
Chloride	28	mg/L		1	EPA 300.0	8/22/2011 4:06:00 PM ARF
Fluoride	0.2	mg/L		0.1	SM 4500FC	8/22/2011 4:10:12 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	11.1	mg/L		0.1	EPA 353.2	8/25/2011 3:29:00 PM MEL
Sulfate	111	mg/L		1	EPA 300.0	8/22/2011 4:06:00 PM ARF
Calcium	81	mg/L		1	EPA 200.7	8/19/2011 3:50:51 PM DG
Magnesium	45	mg/L		1	EPA 200.7	8/19/2011 3:50:51 PM DG
Potassium	6	mg/L		1	EPA 200.7	8/19/2011 3:50:51 PM DG
Sodium	139	mg/L		1	EPA 200.7	8/19/2011 3:50:51 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 3:30:00 PM MEL
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	8/19/2011 11:38:59 PM AMB
Electrical Conductivity	1360	µmhos/cm		5	SM 2510B	8/19/2011 11:38:59 PM AMB
Total Dissolved Solids (180)	800	mg/L		10	SM 2540	8/19/2011 12:00:00 PM JF
<b>Data Quality</b>						
Cation Sum	13.91	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Anion Sum	14.43	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Cation-Anion Balance (± 5%)	1.83	%		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Solids, Total Dissolved (Calc)	770	mg/L		10	SM 1030E	9/8/2011 9:15:32 AM KO

These results apply only to the samples tested.

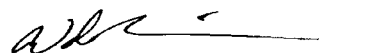
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-004  
**ClientSample ID:** P50113W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 2:40:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:50:51 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:53:27 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 9:53:27 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:50:51 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 9:53:27 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:50:51 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 9:53:27 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/19/2011 3:50:51 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:53:27 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/31/2011 1:43:19 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:53:27 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:50:51 PM	DG
Selenium	0.023	mg/L		0.005	EPA 200.8	8/23/2011 9:53:27 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 9:53:27 PM	MS
Uranium	0.174	mg/L		0.0003	EPA 200.8	8/23/2011 9:53:27 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:53:27 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:50:51 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/30/2011 10:06:45 AM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	8/23/2011 3:16:11 PM	DG
Manganese	0.39	mg/L		0.02	EPA 200.7	8/23/2011 3:16:11 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-004  
**ClientSample ID:** P50113W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 2:40:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	69.7	pCi/L		3	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Alpha Precision (±)	5.1	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta	27.1	pCi/L		4	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Lead 210	2.2	pCi/L		1	OTW01	9/21/2011 3:31:03 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	9/21/2011 3:31:03 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 10:50:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 10:50:00 AM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/20/2011 4:59:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/20/2011 4:59:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.4	pCi/L		1	OTW01	10/4/2011 3:52:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/4/2011 3:52:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	10/4/2011 12:15:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/4/2011 12:15:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/22/2011 2:07:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/22/2011 2:07:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-005  
**ClientSample ID:** P50883W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 3:40:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.80	s.u.			Field	8/16/2011 3:40:00 PM
Conductivity	718	µmhos/cm			Field	8/16/2011 3:40:00 PM
Dissolved Oxygen	4.90	mg/L			Field	8/16/2011 3:40:00 PM
Dissolved Oxygen (pct)	47.0	%			Field	8/16/2011 3:40:00 PM
Turbidity	53.0	NTU			Field	8/16/2011 3:40:00 PM
Temperature	10.7	°C			Field	8/16/2011 3:40:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	342	mg/L		5	SM 2320B	8/18/2011 10:49:20 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	411	mg/L		5	SM 2320B	8/18/2011 10:49:20 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/18/2011 10:49:20 PM KO
Chloride	4	mg/L		1	EPA 300.0	8/19/2011 7:54:00 PM ARF
Fluoride	0.2	mg/L		0.1	SM 4500FC	8/19/2011 5:21:47 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/18/2011 4:10:00 PM MEL
Sulfate	44	mg/L		1	EPA 300.0	8/19/2011 7:54:00 PM ARF
Calcium	45	mg/L		1	EPA 200.7	8/18/2011 5:47:18 PM DG
Magnesium	19	mg/L		1	EPA 200.7	8/18/2011 5:47:18 PM DG
Potassium	6	mg/L		1	EPA 200.7	8/18/2011 5:47:18 PM DG
Sodium	91	mg/L		1	EPA 200.7	8/18/2011 5:47:18 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 2:43:00 PM MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	8/18/2011 10:49:20 PM KO
Electrical Conductivity	753	µmhos/cm		5	SM 2510B	8/18/2011 10:49:20 PM KO
Total Dissolved Solids (180)	410	mg/L		10	SM 2540	8/19/2011 10:10:00 AM JF
<b>Data Quality</b>						
Cation Sum	7.92	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Anion Sum	7.85	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Cation-Anion Balance (± 5%)	0.42	%		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Solids, Total Dissolved (Calc)	210	mg/L		10	SM 1030E	8/25/2011 8:53:25 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-005  
**ClientSample ID:** P50883W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 3:40:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/18/2011 5:47:18 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:45:31 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 5:45:31 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	8/18/2011 5:47:18 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 5:45:31 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:47:18 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 5:45:31 PM	MS
Iron	0.14	mg/L		0.05	EPA 200.7	8/18/2011 5:47:18 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:45:31 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/26/2011 3:49:13 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:45:31 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:47:18 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:45:31 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 5:45:31 PM	MS
Uranium	0.0325	mg/L		0.0003	EPA 200.8	8/23/2011 5:45:31 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:45:31 PM	MS
Zinc	0.16	mg/L		0.01	EPA 200.7	8/18/2011 5:47:18 PM	DG
<b>Metals - Suspended</b>							
Uranium	0.0015	mg/L		0.0003	EPA 200.8	8/28/2011 11:37:46 AM	MS
<b>Metals - Total</b>							
Iron	7.71	mg/L		0.05	EPA 200.7	8/22/2011 10:33:43 PM	DG
Manganese	0.09	mg/L		0.02	EPA 200.7	8/22/2011 10:33:43 PM	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-005  
**ClientSample ID:** P50883W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 3:40:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	18.8	pCi/L		2	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Alpha Precision (±)	2.6	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta	13.1	pCi/L		4	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta Precision (±)	2.5	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Lead 210	2.3	pCi/L		1	OTW01	9/21/2011 12:14:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	9/21/2011 12:14:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 8:56:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 8:56:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/19/2011 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/19/2011 5:54:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/12/2011 9:07:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/12/2011 9:07:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	3.5	pCi/L		1	OTW01	9/22/2011 1:59:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	9/22/2011 1:59:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/22/2011 10:00:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/22/2011 10:00:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/14/2011 11:31:07 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/14/2011 11:31:07 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/23/2011 1:37:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/23/2011 1:37:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-001  
**ClientSample ID:** P61006W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 12:30:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.20	s.u.			Field	8/16/2011 12:30:00 PM
Conductivity	1031	µmhos/cm			Field	8/16/2011 12:30:00 PM
Dissolved Oxygen	0.97	mg/L			Field	8/16/2011 12:30:00 PM
Dissolved Oxygen (pct)	9.0	%			Field	8/16/2011 12:30:00 PM
Turbidity	3.61	NTU			Field	8/16/2011 12:30:00 PM
Temperature	10.8	°C			Field	8/16/2011 12:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	504	mg/L		5	SM 2320B	8/18/2011 9:55:36 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	590	mg/L		5	SM 2320B	8/18/2011 9:55:36 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	13	mg/L		5	SM 2320B	8/18/2011 9:55:36 PM KO
Chloride	2	mg/L		1	EPA 300.0	8/19/2011 6:22:00 PM ARF
Fluoride	0.1	mg/L		0.1	SM 4500FC	8/18/2011 9:55:36 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/18/2011 4:06:00 PM MEL
Sulfate	78	mg/L		1	EPA 300.0	8/19/2011 6:22:00 PM ARF
Calcium	15	mg/L		1	EPA 200.7	8/18/2011 5:24:01 PM DG
Magnesium	7	mg/L		1	EPA 200.7	8/18/2011 5:24:01 PM DG
Potassium	8	mg/L		1	EPA 200.7	8/18/2011 5:24:01 PM DG
Sodium	254	mg/L		1	EPA 200.7	8/18/2011 5:24:01 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 2:34:00 PM MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	8/18/2011 9:55:36 PM KO
Electrical Conductivity	1140	µmhos/cm		5	SM 2510B	8/18/2011 9:55:36 PM KO
Total Dissolved Solids (180)	650	mg/L		10	SM 2540	8/19/2011 9:50:00 AM JF
<b>Data Quality</b>						
Cation Sum	12.60	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Anion Sum	11.75	meq/L		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Cation-Anion Balance (± 5%)	3.50	%		0.01	SM 1030E	8/25/2011 8:53:25 AM KO
Solids, Total Dissolved (Calc)	670	mg/L		10	SM 1030E	8/25/2011 8:53:25 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-001  
**ClientSample ID:** P61006W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 12:30:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/18/2011 5:24:01 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:21:32 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 5:21:32 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	8/18/2011 5:24:01 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 5:21:32 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:24:01 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 5:21:32 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/18/2011 5:24:01 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:21:32 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/26/2011 3:42:09 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:21:32 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:24:01 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 5:21:32 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 5:21:32 PM	MS
Uranium	0.0021	mg/L		0.0003	EPA 200.8	8/23/2011 5:21:32 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 5:21:32 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/18/2011 5:24:01 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 11:16:24 AM	MS
<b>Metals - Total</b>							
Iron	0.16	mg/L		0.05	EPA 200.7	8/22/2011 10:24:04 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	8/22/2011 10:24:04 PM	DG

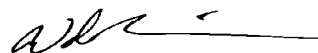
These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/30/2011  
**Report ID:** S1108341001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108341-001  
**ClientSample ID:** P61006W  
**COC:** 137108

**WorkOrder:** S1108341  
**CollectionDate:** 8/16/2011 12:30:00 PM  
**DateReceived:** 8/17/2011 8:05:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	7.4	pCi/L		2	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Alpha Precision (±)	1.8	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta	7.3	pCi/L		4	SM 7110B	9/23/2011 1:07:00 AM	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	9/23/2011 1:07:00 AM	SH
Lead 210	ND	pCi/L		1	OTW01	9/21/2011 12:14:00 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 12:14:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 8:56:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 8:56:00 AM	SH
Radium 226	0.8	pCi/L		0.2	SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/1/2011 11:04:00 AM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/19/2011 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/19/2011 5:54:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/13/2011 9:06:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/13/2011 9:06:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	2.2	pCi/L		1	OTW01	9/22/2011 1:59:00 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	9/22/2011 1:59:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/22/2011 10:00:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/22/2011 10:00:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/13/2011 12:43:56 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/13/2011 12:43:56 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-006  
**ClientSample ID:** P84665W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 4:00:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.41	s.u.			Field	8/17/2011 4:00:00 PM
Conductivity	1052	µmhos/cm			Field	8/17/2011 4:00:00 PM
Dissolved Oxygen	1.55	mg/L			Field	8/17/2011 4:00:00 PM
Dissolved Oxygen (pct)	14.5	%			Field	8/17/2011 4:00:00 PM
Turbidity	20.2	NTU			Field	8/17/2011 4:00:00 PM
Temperature	10.3	°C			Field	8/17/2011 4:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	464	mg/L		5	SM 2320B	8/20/2011 12:01:09 AM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	566	mg/L		5	SM 2320B	8/20/2011 12:01:09 AM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/20/2011 12:01:09 AM AMB
Chloride	15	mg/L		1	EPA 300.0	8/22/2011 4:28:00 PM ARF
Fluoride	0.1	mg/L		0.1	SM 4500FC	8/22/2011 4:17:03 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	0.6	mg/L		0.1	EPA 353.2	8/25/2011 3:31:00 PM MEL
Sulfate	108	mg/L		1	EPA 300.0	8/22/2011 4:28:00 PM ARF
Calcium	88	mg/L		1	EPA 200.7	8/19/2011 3:55:29 PM DG
Magnesium	43	mg/L		1	EPA 200.7	8/19/2011 3:55:29 PM DG
Potassium	6	mg/L		1	EPA 200.7	8/19/2011 3:55:29 PM DG
Sodium	87	mg/L		1	EPA 200.7	8/19/2011 3:55:29 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 3:32:00 PM MEL
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	8/20/2011 12:01:09 AM AMB
Electrical Conductivity	1120	µmhos/cm		5	SM 2510B	8/20/2011 12:01:09 AM AMB
Total Dissolved Solids (180)	650	mg/L		10	SM 2540	8/19/2011 12:10:00 PM JF
<b>Data Quality</b>						
Cation Sum	11.87	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Anion Sum	11.98	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Cation-Anion Balance (± 5%)	0.48	%		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Solids, Total Dissolved (Calc)	630	mg/L		10	SM 1030E	9/8/2011 9:15:32 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-006  
**ClientSample ID:** P84665W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 4:00:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:55:29 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 10:01:26 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 10:01:26 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:55:29 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 10:01:26 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:55:29 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 10:01:26 PM	MS
Iron	0.38	mg/L		0.05	EPA 200.7	8/19/2011 3:55:29 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 10:01:26 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/31/2011 1:55:36 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 10:01:26 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:55:29 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 10:01:26 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 10:01:26 PM	MS
Uranium	0.0617	mg/L		0.0003	EPA 200.8	8/23/2011 10:01:26 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 10:01:26 PM	MS
Zinc	0.79	mg/L		0.01	EPA 200.7	8/19/2011 3:55:29 PM	DG
<b>Metals - Suspended</b>							
Uranium	0.0009	mg/L		0.0003	EPA 200.8	8/30/2011 10:12:19 AM	MS
<b>Metals - Total</b>							
Iron	2.80	mg/L		0.05	EPA 200.7	8/23/2011 3:20:50 PM	DG
Manganese	0.13	mg/L		0.02	EPA 200.7	8/23/2011 3:20:50 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-006  
**ClientSample ID:** P84665W  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 4:00:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	29.5	pCi/L		3	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Alpha Precision (±)	3.5	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta	23.0	pCi/L		4	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Lead 210	4.0	pCi/L		1	OTW01	9/21/2011 3:31:03 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	9/21/2011 3:31:03 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 10:50:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 10:50:00 AM	SH
Radium 226	0.7	pCi/L		0.2	SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/26/2011 5:56:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/26/2011 5:56:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.7	pCi/L		1	OTW01	10/4/2011 3:52:00 PM	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	10/4/2011 3:52:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	10/4/2011 12:15:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/4/2011 12:15:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/22/2011 2:07:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/22/2011 2:07:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-005  
**ClientSample ID:** SB WELL01  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 3:10:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.03	s.u.			Field	8/17/2011 3:10:00 PM
Conductivity	1182	µmhos/cm			Field	8/17/2011 3:10:00 PM
Dissolved Oxygen	1.84	mg/L			Field	8/17/2011 3:10:00 PM
Dissolved Oxygen (pct)	17.7	%			Field	8/17/2011 3:10:00 PM
Turbidity	1.07	NTU			Field	8/17/2011 3:10:00 PM
Temperature	11.0	°C			Field	8/17/2011 3:10:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	524	mg/L		5	SM 2320B	8/19/2011 11:50:15 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	581	mg/L		5	SM 2320B	8/19/2011 11:50:15 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	29	mg/L		5	SM 2320B	8/19/2011 11:50:15 PM AMB
Chloride	2	mg/L		1	EPA 300.0	8/22/2011 4:17:00 PM ARF
Fluoride	ND	mg/L		0.1	SM 4500FC	8/22/2011 4:13:30 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/25/2011 3:30:00 PM MEL
Sulfate	94	mg/L		1	EPA 300.0	8/22/2011 4:17:00 PM ARF
Calcium	2	mg/L		1	EPA 200.7	8/19/2011 3:53:10 PM DG
Magnesium	ND	mg/L		1	EPA 200.7	8/19/2011 3:53:10 PM DG
Potassium	3	mg/L		1	EPA 200.7	8/19/2011 3:53:10 PM DG
Sodium	281	mg/L		1	EPA 200.7	8/19/2011 3:53:10 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/29/2011 3:31:00 PM MEL
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	8/19/2011 11:50:15 PM AMB
Electrical Conductivity	1240	µmhos/cm		5	SM 2510B	8/19/2011 11:50:15 PM AMB
Total Dissolved Solids (180)	720	mg/L		10	SM 2540	8/19/2011 12:05:00 PM JF
<b>Data Quality</b>						
Cation Sum	12.38	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Anion Sum	12.48	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Cation-Anion Balance (± 5%)	0.43	%		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Solids, Total Dissolved (Calc)	700	mg/L		10	SM 1030E	9/8/2011 9:15:32 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-005  
**ClientSample ID:** SB WELL01  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 3:10:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:53:10 PM DG
Arsenic	0.008	mg/L		0.005	EPA 200.8	8/23/2011 9:57:26 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 9:57:26 PM MS
Boron	0.1	mg/L		0.1	EPA 200.7	8/19/2011 3:53:10 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 9:57:26 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:53:10 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 9:57:26 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	8/19/2011 3:53:10 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:57:26 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/31/2011 1:48:34 PM VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:57:26 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:53:10 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:57:26 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 9:57:26 PM MS
Uranium	0.0014	mg/L		0.0003	EPA 200.8	8/23/2011 9:57:26 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:57:26 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:53:10 PM DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	8/30/2011 10:09:39 AM MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	8/23/2011 3:18:30 PM DG
Manganese	ND	mg/L		0.02	EPA 200.7	8/23/2011 3:18:30 PM DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-005  
**ClientSample ID:** SB WELL01  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 3:10:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Lead 210	ND	pCi/L		1	OTW01	9/21/2011 3:31:03 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 3:31:03 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 10:50:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 10:50:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/26/2011 5:56:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/26/2011 5:56:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.1	pCi/L		1	OTW01	10/4/2011 3:52:00 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/4/2011 3:52:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	10/4/2011 12:15:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/4/2011 12:15:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/22/2011 2:07:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/22/2011 2:07:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-002  
**ClientSample ID:** SB WELL02  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 1:30:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.78	s.u.			Field	8/17/2011 1:30:00 PM
Conductivity	1020	µmhos/cm			Field	8/17/2011 1:30:00 PM
Dissolved Oxygen	1.88	mg/L			Field	8/17/2011 1:30:00 PM
Dissolved Oxygen (pct)	16.1	%			Field	8/17/2011 1:30:00 PM
Turbidity	1.22	NTU			Field	8/17/2011 1:30:00 PM
Temperature	10.6	°C			Field	8/17/2011 1:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	469	mg/L		5	SM 2320B	8/19/2011 11:06:50 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	566	mg/L		5	SM 2320B	8/19/2011 11:06:50 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	8/19/2011 11:06:50 PM AMB
Chloride	1	mg/L		1	EPA 300.0	8/22/2011 3:40:00 PM ARF
Fluoride	0.1	mg/L		0.1	SM 4500FC	8/22/2011 4:03:43 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/25/2011 3:22:00 PM MEL
Sulfate	79	mg/L		1	EPA 300.0	8/22/2011 3:40:00 PM ARF
Calcium	21	mg/L		1	EPA 200.7	8/19/2011 3:46:13 PM DG
Magnesium	11	mg/L		1	EPA 200.7	8/19/2011 3:46:13 PM DG
Potassium	12	mg/L		1	EPA 200.7	8/19/2011 3:46:13 PM DG
Sodium	196	mg/L		1	EPA 200.7	8/19/2011 3:46:13 PM DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	8/29/2011 3:28:00 PM MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	8/19/2011 11:06:50 PM AMB
Electrical Conductivity	1070	µmhos/cm		5	SM 2510B	8/19/2011 11:06:50 PM AMB
Total Dissolved Solids (180)	610	mg/L		10	SM 2540	8/19/2011 11:50:00 AM JF
<b>Data Quality</b>						
Cation Sum	10.73	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Anion Sum	11.05	meq/L		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Cation-Anion Balance (± 5%)	1.46	%		0.01	SM 1030E	9/8/2011 9:15:32 AM KO
Solids, Total Dissolved (Calc)	600	mg/L		10	SM 1030E	9/8/2011 9:15:32 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-002  
**ClientSample ID:** SB WELL02  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 1:30:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/19/2011 3:46:13 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:45:29 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/23/2011 9:45:29 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	8/19/2011 3:46:13 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/23/2011 9:45:29 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:46:13 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/23/2011 9:45:29 PM	MS
Iron	0.11	mg/L		0.05	EPA 200.7	8/19/2011 3:46:13 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:45:29 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/31/2011 1:39:48 PM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:45:29 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:46:13 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/23/2011 9:45:29 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/23/2011 9:45:29 PM	MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	8/23/2011 9:45:29 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/23/2011 9:45:29 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/19/2011 3:46:13 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/30/2011 10:01:24 AM	MS
<b>Metals - Total</b>							
Iron	0.16	mg/L		0.05	EPA 200.7	8/23/2011 3:11:32 PM	DG
Manganese	0.05	mg/L		0.02	EPA 200.7	8/23/2011 3:11:32 PM	DG

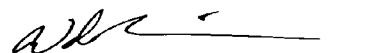
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 10/7/2011  
**Report ID:** S1108364001

**ProjectName:** ROSS  
**Lab ID:** S1108364-002  
**ClientSample ID:** SB WELL02  
**COC:** 137111

**WorkOrder:** S1108364  
**CollectionDate:** 8/17/2011 1:30:00 PM  
**DateReceived:** 8/18/2011 8:19:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta	10.0	pCi/L		4	SM 7110B	9/28/2011 5:42:00 PM	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	9/28/2011 5:42:00 PM	SH
Lead 210	1.1	pCi/L		1	OTW01	9/21/2011 3:31:03 PM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	9/21/2011 3:31:03 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/21/2011 10:50:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/21/2011 10:50:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/2/2011 2:38:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/20/2011 4:59:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/20/2011 4:59:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/26/2011 9:12:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/26/2011 9:12:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	2.1	pCi/L		1	OTW01	10/4/2011 3:52:00 PM	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	10/4/2011 3:52:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	10/4/2011 12:15:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/4/2011 12:15:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/20/2011 8:09:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/22/2011 2:07:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/22/2011 2:07:00 PM	SH

## These results apply only to the samples tested.

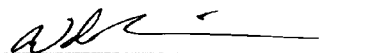
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-002  
**ClientSample ID:** TW01  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/11/2011 4:10:00 PM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.10	s.u.			Field	8/11/2011 4:10:00 PM
Conductivity	2640	µmhos/cm			Field	8/11/2011 4:10:00 PM
Dissolved Oxygen	1.26	mg/L			Field	8/11/2011 4:10:00 PM
Dissolved Oxygen (pct)	12.7	%			Field	8/11/2011 4:10:00 PM
Turbidity	0.70	NTU			Field	8/11/2011 4:10:00 PM
Temperature	14.2	°C			Field	8/11/2011 4:10:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	688	mg/L		5	SM 2320B	8/15/2011 9:25:50 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	807	mg/L		5	SM 2320B	8/15/2011 9:25:50 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	16	mg/L		5	SM 2320B	8/15/2011 9:25:50 PM AMB
Chloride	6	mg/L		1	EPA 300.0	8/15/2011 10:24:00 PM ARF
Fluoride	1.1	mg/L		0.1	SM 4500FC	8/15/2011 9:25:50 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/17/2011 2:17:00 PM MEL
Sulfate	426	mg/L		1	EPA 300.0	8/15/2011 10:24:00 PM ARF
Calcium	15	mg/L		1	EPA 200.7	8/19/2011 1:20:43 PM DG
Magnesium	8	mg/L		1	EPA 200.7	8/19/2011 1:20:43 PM DG
Potassium	10	mg/L		1	EPA 200.7	8/19/2011 1:20:43 PM DG
Sodium	528	mg/L		1	EPA 200.7	8/19/2011 1:20:43 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/16/2011 3:20:00 PM MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	8/15/2011 9:25:50 PM AMB
Electrical Conductivity	2280	µmhos/cm		5	SM 2510B	8/15/2011 9:25:50 PM AMB
Total Dissolved Solids (180)	1470	mg/L		10	SM 2540	8/16/2011 1:45:00 PM JF
<b>Data Quality</b>						
Cation Sum	24.56	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Anion Sum	22.86	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Cation-Anion Balance (± 5%)	3.59	%		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Solids, Total Dissolved (Calc)	1400	mg/L		10	SM 1030E	8/22/2011 1:09:54 PM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-002  
**ClientSample ID:** TW01  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/11/2011 4:10:00 PM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/16/2011 1:58:21 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:24:36 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/15/2011 4:24:36 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	8/16/2011 1:58:21 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/15/2011 4:24:36 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/16/2011 1:58:21 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/15/2011 4:24:36 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/16/2011 1:58:21 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:24:36 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/17/2011 10:19:37 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:24:36 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/16/2011 1:58:21 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:24:36 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/15/2011 4:24:36 PM	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	8/15/2011 4:24:36 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:24:36 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/16/2011 1:58:21 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 10:20:25 AM	MS
<b>Metals - Total</b>							
Iron	0.18	mg/L		0.05	EPA 200.7	8/18/2011 2:51:27 PM	DG
Manganese	0.02	mg/L		0.02	EPA 200.7	8/18/2011 2:51:27 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-002  
**ClientSample ID:** TW01  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/11/2011 4:10:00 PM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta	ND	pCi/L		7	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Lead 210	ND	pCi/L		1	OTW01	9/2/2011 4:26:02 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 4:26:02 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/2/2011 11:54:03 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 11:54:03 AM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/16/2011 4:46:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/16/2011 4:46:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	8/26/2011 8:35:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	8/26/2011 8:35:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	9/8/2011 5:30:44 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	9/8/2011 5:30:44 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/8/2011 11:58:20 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/8/2011 11:58:20 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/1/2011 1:47:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/1/2011 1:47:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-006  
**ClientSample ID:** TW02  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 11:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.00	s.u.			Field	8/12/2011 11:30:00 AM
Conductivity	2730	µmhos/cm			Field	8/12/2011 11:30:00 AM
Dissolved Oxygen	1.73	mg/L			Field	8/12/2011 11:30:00 AM
Dissolved Oxygen (pct)	17.5	%			Field	8/12/2011 11:30:00 AM
Turbidity	1.81	NTU			Field	8/12/2011 11:30:00 AM
Temperature	13.9	°C			Field	8/12/2011 11:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	617	mg/L		5	SM 2320B	8/15/2011 10:30:42 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	716	mg/L		5	SM 2320B	8/15/2011 10:30:42 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	18	mg/L		5	SM 2320B	8/15/2011 10:30:42 PM AMB
Chloride	11	mg/L		1	EPA 300.0	8/16/2011 12:24:00 AM ARF
Fluoride	0.6	mg/L		0.1	SM 4500FC	8/15/2011 10:30:42 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/17/2011 2:26:00 PM MEL
Sulfate	496	mg/L		1	EPA 300.0	8/16/2011 12:24:00 AM ARF
Calcium	26	mg/L		1	EPA 200.7	8/19/2011 1:27:37 PM DG
Magnesium	11	mg/L		1	EPA 200.7	8/19/2011 1:27:37 PM DG
Potassium	13	mg/L		1	EPA 200.7	8/19/2011 1:27:37 PM DG
Sodium	514	mg/L		1	EPA 200.7	8/19/2011 1:27:37 PM DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	8/16/2011 4:59:00 PM MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	8/15/2011 10:30:42 PM AMB
Electrical Conductivity	2310	µmhos/cm		5	SM 2510B	8/15/2011 10:30:42 PM AMB
Total Dissolved Solids (180)	1490	mg/L		10	SM 2540	8/16/2011 2:10:00 PM JF
<b>Data Quality</b>						
Cation Sum	24.88	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Anion Sum	23.00	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Cation-Anion Balance (± 5%)	3.91	%		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Solids, Total Dissolved (Calc)	1440	mg/L		10	SM 1030E	8/22/2011 1:09:54 PM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-006  
**ClientSample ID:** TW02  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 11:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/16/2011 2:07:33 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:48:42 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/15/2011 4:48:42 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	8/16/2011 2:07:33 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/15/2011 4:48:42 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:07:33 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/15/2011 4:48:42 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/16/2011 2:07:33 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:48:42 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/17/2011 10:26:41 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:48:42 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:07:33 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:48:42 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/15/2011 4:48:42 PM	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	8/15/2011 4:48:42 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:48:42 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/16/2011 2:07:33 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 10:36:24 AM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	8/18/2011 3:14:29 PM	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	8/18/2011 3:14:29 PM	DG

## These results apply only to the samples tested.

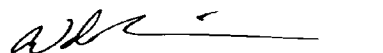
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-006  
**ClientSample ID:** TW02  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/12/2011 11:30:00 AM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	6.6	pCi/L		3	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Alpha Precision (±)	2.5	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta	9.6	pCi/L		7	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Lead 210	1.2	pCi/L		1	OTW01	9/2/2011 4:26:02 PM	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	9/2/2011 4:26:02 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/2/2011 11:54:03 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 11:54:03 AM	SH
Radium 226	0.4	pCi/L		0.2	SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/19/2011 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/19/2011 5:54:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	8/29/2011 9:37:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	8/29/2011 9:37:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	1.0	pCi/L		1	OTW01	9/9/2011 9:13:47 AM	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	9/9/2011 9:13:47 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/8/2011 2:23:46 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/8/2011 2:23:46 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/2/2011 7:22:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/2/2011 7:22:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-001  
**ClientSample ID:** TWWELL03  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/11/2011 2:50:00 PM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.06	s.u.			Field	8/11/2011 2:50:00 PM
Conductivity	1490	µmhos/cm			Field	8/11/2011 2:50:00 PM
Dissolved Oxygen	4.45	mg/L			Field	8/11/2011 2:50:00 PM
Dissolved Oxygen (pct)	44.4	%			Field	8/11/2011 2:50:00 PM
Turbidity	1.14	NTU			Field	8/11/2011 2:50:00 PM
Temperature	14.2	°C			Field	8/11/2011 2:50:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	581	mg/L		5	SM 2320B	8/15/2011 9:13:53 PM AMB
Alkalinity, Bicarbonate as HCO <sub>3</sub>	635	mg/L		5	SM 2320B	8/15/2011 9:13:53 PM AMB
Alkalinity, Carbonate as CO <sub>3</sub>	37	mg/L		5	SM 2320B	8/15/2011 9:13:53 PM AMB
Chloride	3	mg/L		1	EPA 300.0	8/15/2011 10:10:00 PM ARF
Fluoride	1.5	mg/L		0.1	SM 4500FC	8/15/2011 9:13:53 PM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	8/17/2011 2:16:00 PM MEL
Sulfate	198	mg/L		1	EPA 300.0	8/15/2011 10:10:00 PM ARF
Calcium	3	mg/L		1	EPA 200.7	8/19/2011 1:18:25 PM DG
Magnesium	1	mg/L		1	EPA 200.7	8/19/2011 1:18:25 PM DG
Potassium	4	mg/L		1	EPA 200.7	8/19/2011 1:18:25 PM DG
Sodium	386	mg/L		1	EPA 200.7	8/19/2011 1:18:25 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	8/16/2011 3:19:00 PM MEL
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	8/15/2011 9:13:53 PM AMB
Electrical Conductivity	1620	µmhos/cm		5	SM 2510B	8/15/2011 9:13:53 PM AMB
Total Dissolved Solids (180)	970	mg/L		10	SM 2540	8/16/2011 1:40:00 PM JF
<b>Data Quality</b>						
Cation Sum	17.14	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Anion Sum	15.89	meq/L		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Cation-Anion Balance (± 5%)	3.78	%		0.01	SM 1030E	8/22/2011 1:09:54 PM KO
Solids, Total Dissolved (Calc)	940	mg/L		10	SM 1030E	8/22/2011 1:09:54 PM KO

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

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-001  
**ClientSample ID:** TWWELL03  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/11/2011 2:50:00 PM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	8/16/2011 1:56:05 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:06:26 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	8/15/2011 4:06:26 PM	MS
Boron	0.5	mg/L		0.1	EPA 200.7	8/16/2011 1:56:05 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	8/15/2011 4:06:26 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	8/16/2011 1:56:05 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	8/15/2011 4:06:26 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	8/16/2011 1:56:05 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:06:26 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	8/17/2011 10:12:36 AM	VR
Molybdenum	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:06:26 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	8/16/2011 1:56:05 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	8/15/2011 4:06:26 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	8/15/2011 4:06:26 PM	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	8/15/2011 4:06:26 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	8/15/2011 4:06:26 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	8/16/2011 1:56:05 PM	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	8/28/2011 10:17:45 AM	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	8/18/2011 2:49:08 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	8/18/2011 2:49:08 PM	DG

These results apply only to the samples tested.

## RL - Reporting Limit

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- S Spike Recovery outside accepted recovery limits

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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Aven  
Sheridan, WY 82801

**Date Reported** 9/22/2011  
**Report ID:** S1108252001

**ProjectName:** ROSS ISR  
**Lab ID:** S1108252-001  
**ClientSample ID:** TWWELL03  
**COC:** 137107

**WorkOrder:** S1108252  
**CollectionDate:** 8/11/2011 2:50:00 PM  
**DateReceived:** 8/12/2011 3:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta	ND	pCi/L		7	SM 7110B	9/1/2011 7:54:40 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	9/1/2011 7:54:40 PM	SH
Lead 210	ND	pCi/L		1	OTW01	9/2/2011 4:26:02 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 4:26:02 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/2/2011 11:54:03 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/2/2011 11:54:03 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	8/25/2011 5:40:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	9/16/2011 4:46:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	9/16/2011 4:46:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	8/26/2011 8:35:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	8/26/2011 8:35:00 AM	SH
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	9/8/2011 5:30:44 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	9/8/2011 5:30:44 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	9/8/2011 11:58:20 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	9/8/2011 11:58:20 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	9/7/2011 9:07:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	9/1/2011 1:47:00 PM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	9/1/2011 1:47:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
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Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 19XX18 Date: 11-22-11 Time: 1145

**Landowner**

Name: Merit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 18

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Industrial  
~~Stock~~ ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: P67747W

Permit No. P67747W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.45

Cond. 3.07mS

Temp. °C 10.6

Turbidity (ntu) 0.16

D.O. (mg/L) 4.55/41.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - foggy - no odor -  
5 sample bottles - no F.M.

COC# 131183

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 22X-19 Date: 11-22-11 Time: 1230

**Landowner**

Name: Merit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE NW

SEC 19

TWN 53

RNG 67

Industrial ☒  
~~Stock~~

~~Domestic~~ \_\_\_\_\_

Picture #(s) \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50917W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.69

Cond. 2.71 mS

Temp. °C 10.1

Turbidity (ntu) 0.00

D.O. (mg/L) 1.64 / 15.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - fizzy - no odor -  
5 sample bottles - no 4.14

COC# 131183

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: ARH02 Date: 11-21-11 Time: 1130

**Landowner**

Name: Reynolds

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr \_\_\_\_\_

SEC \_\_\_\_\_

TWN \_\_\_\_\_

RNG \_\_\_\_\_

Picture #(s) Photo 2 & 3

Stock \_\_\_\_\_

P:\Strata\09142\Reynolds-Well-11-21-11\  
Photo 02 - ARH02.JPG & Photo 03 - ARH03.JPG

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat N 44.59927

Long W 104.92243

Elev. 4100

**Water Quality**

pH 7.17

Cond. 2.80 uS

Temp. °C 8.8

Turbidity (ntu) 79.8

D.O. (mg/L) 4.65 / 40.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: House well - 5 sample bottles -  
no 4.14 - water turbid - slight odor

COC # 131182

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: ARL01 Date: 11-21-11 Time: 1100

**Landowner**

Name: Reynold

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr \_\_\_\_\_

SEC \_\_\_\_\_

TWN \_\_\_\_\_

RNG \_\_\_\_\_

Picture #(s) photo 1

Stock ☒

P:\Strata\09142\Reynold - well - 11-21-11\photo 01.  
ARL01.JPG

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat N 44.60499

Long W 104.93496

Elev. 4141

**Water Quality**

pH 7.20

Cond. 1616  $\mu$ S

Temp. °C 9.1

Turbidity (ntu) 7.89

D.O. (mg/L) 1.26/11.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: North livestock well - 5 sample  
bottles - no 4,14. Water clear - no odor

COC# 131182

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: CS WELL 01 Date: 11-21-11 Time: 1520

**Landowner**

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr nwnw

SEC 20

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P132537W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.91

Cond. 3.24 uS

Temp. °C 9.7

Turbidity (ntu) 0.92

D.O. (mg/L) 1.39 / 12.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor  
5 sample bottles - ~~Q2~~ no 4.14

COC # 131182

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: DW WELLOI Date: 11-22-11 Time: 1330

**Landowner**

Name: Wood

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNW

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 8.33

Cond. 3.31 mS

Temp. °C 9.2

Turbidity (ntu) 5.89

D.O. (mg/L) 1.74 / 15.6

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor - 5 sample  
bottles - no 4.14

COC # 131183



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELLO3 Date: 11-21-11 Time: 1300

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 5

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7324P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.51

Cond. 1805  $\mu$ S

Temp. °C 8.9

Turbidity (ntu) 21.2

D.O. (mg/L) 1.74/15.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly turbid - no odor -  
5 sample bottles - no 4.14

COC# 131182

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELL 04 Date: 11-21-11 Time: 1340

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7326P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.18

Cond. 1691  $\mu$ S

Temp. °C 8.4

Turbidity (ntu) 5.46

D.O. (mg/L) 1.53/13.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5 sample  
bottles - no 4.14

COC # 131182

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

Name: HB WELL 05 Date: 11-21-11 Time: 1550

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P 7430P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.35

Cond. 1698  $\mu$ S

Temp. °C 8.9

Turbidity (ntu) 386

D.O. (mg/L) 2.29/20.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water turbid (redish/brown in color)  
- no odor - 5 sample bottles - no 4.14

COC# 131182

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P17177W Date: 12-6-11 Time: 1300

**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: \_\_\_\_\_

Permit No. P17177W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.92

Cond. 731  $\mu$ S

Temp. °C 8.5

Turbidity (ntu) 0.00

D.O. (mg/L) 1.22 / 10.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stock tank well East of Dallas and Ames  
house by creek - water clear - no odor - 5  
sample bottles.

COC# 131184

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

**Name:** P50113W **Date:** 12-6-11 **Time:** 1110

**Landowner**

**Name:** Burch

**Address** \_\_\_\_\_

**Phone#** \_\_\_\_\_

**Legal Location**

**Qtr/Qtr** SWNE

**SEC** 2

**TWN** 53

**RNG** 68

**Picture #(s)** \_\_\_\_\_

**Stock** ✓

**Domestic** \_\_\_\_\_

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** P50113W

**Location (Decimal Degrees)**

**Lat** \_\_\_\_\_

**Long** \_\_\_\_\_

**Elev.** \_\_\_\_\_

**Water Quality**

**pH** 7.67

**Cond.** 1718  $\mu$ S

**Temp. °C** 7.8

**Turbidity (ntu)** 0.24

**D.O. (mg/L)** 1.87 / 16.1

**Water Level (ft):** \_\_\_\_\_

**% Combustible Gas:** \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

**Ambient Air Temp:** \_\_\_\_\_

**Comments:** stock tank well below main facilities -  
water clear - no odor - no 4.14

CDC # 131184

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61006W Date: 12-7-11 Time: 1230

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 48

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61006W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.32

Cond. 1064  $\mu$ S

Temp. °C 8.8

Turbidity (ntu) 1.02

D.O. (mg/L) 1.88 / 16.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Main house and stock well - Water  
clear - no odor - 5 sample bottles - no 4.14

COC# 131185

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61007W Date: 12-7-11 Time: 1200

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWSW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61007W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.94

Cond. 1142  $\mu$ S

Temp. °C 6.3

Turbidity (ntu) 29.4

D.O. (mg/L) 2.02/16.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: West well by white house - water  
clear - no odor - 5 sample bottles - no  
rt. 14 - water slightly turbid (light brown in  
color)

COC# 131185

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P 71108W Date: 12-6-11 Time: 1210

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW5W

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P71108W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.66

Cond. 1889  $\mu$ S

Temp. °C 7.9

Turbidity (ntu) 0.46

D.O. (mg/L) 1.49 / 12.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Dallas and Anna's house well - collected  
sample at outside hydrant (raw) - water  
clear - no odor - no 4.14 - 5 sample  
bottles

COC# 131184



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P84665W Date: 12-6-11 Time: 1045

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW/NW

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P84665W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.71

Cond. 1078  $\mu$ S

Temp. °C 7.3

Turbidity (ntu) 3.75

D.O. (mg/L) 3.38 / 29.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Windmill well - water had a little  
sand in it - no odor - 5 sample bottles -  
no 4.14

COC# 131184

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: PH WELLOI Date: 11-22-11 Time: 1030

Landowner Name: Philip ~~HABECK~~ Habeck Legal Location Qtr/Qtr \_\_\_\_\_  
Address \_\_\_\_\_ SEC \_\_\_\_\_  
Phone# \_\_\_\_\_ TWN \_\_\_\_\_  
RNG \_\_\_\_\_

Picture #(s) Photo 1 Stock \_\_\_\_\_

P:/Strata/09142/Habeck Well - 11-22-11/Photo  
01 - PHWELLOI.JPG

SEO Permitted Facility Name: \_\_\_\_\_ Permit No. P22584P ?

Location (Decimal Degrees)  
Lat N 44.54514  
Long W 104.96651  
Elev. 4350 } *not the location of well. By house*  
Water Quality  
pH 9.09  
Cond. 1036  $\mu$ S  
Temp. °C 9.0  
Turbidity (ntu) 2.21  
D.O. (mg/L) 2.70 / 23.9

Water Level (ft): \_\_\_\_\_ % Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_ Ambient Air Temp: \_\_\_\_\_

Comments: - not sure where well itself is - collected sample inside house facet. - water clear - no odor - 5 sample bottles - NO 4.14

COC# 131183

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SB WELL 01 Date: 12-6-11 Time: 1145

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

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 9.14

Cond. 1208  $\mu$ S

Temp. °C 7.7

Turbidity (ntu) 3.13

D.O. (mg/L) 1.51 / 13.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Main facility well - water clear -  
no odor. 5 sample bottles - not 14 - Collected  
sample at F.F. hydrant at barn

COC# 131184

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SBWELL02 Date: 12-6-11 Time: 1330

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 1

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. —

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.93

Cond. 789  $\mu$ S

Temp. °C 8.4

Turbidity (ntu) 0.17

D.O. (mg/L) 1.42 / 12.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stock tank well by Reservoir - water  
clear - no odor - 5 sample bottles - no 4.14

COC # 131184

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TWO1 Date: 11-22-11 Time: 09:30

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.99

Cond. 2.57 mS

Temp. °C 12.0

Turbidity (ntu) 0.79

D.O. (mg/L) 1.72 / 27.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Collected sample from inside TS's house.  
TS said he warm or hot water was getting real  
stinky (rotten egg smell) - H<sub>2</sub>S gas? - Collected warm  
water sample. - 5 sample bottles - no 4.14

COC # 131183



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1111397-004  
**ClientSample ID:** 19XX18  
**COC:** 131183

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)  
**WorkOrder:** S1111397  
**CollectionDate:** 11/22/2011 11:45:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.45	s.u.			Field	11/22/2011 11:45:00 AM
Conductivity	3070	µmhos/cm			Field	11/22/2011 11:45:00 AM
Dissolved Oxygen	4.55	mg/L			Field	11/22/2011 11:45:00 AM
Dissolved Oxygen (pct)	41.7	%			Field	11/22/2011 11:45:00 AM
Turbidity	0.16	NTU			Field	11/22/2011 11:45:00 AM
Temperature	10.6	°C			Field	11/22/2011 11:45:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	536	mg/L		5	SM 2320B	11/27/2011 6:12:18 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	597	mg/L		5	SM 2320B	11/27/2011 6:12:18 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	28	mg/L		5	SM 2320B	11/27/2011 6:12:18 PM KO
Chloride	10	mg/L		1	EPA 300.0	11/28/2011 2:32:00 PM KO
Fluoride	0.6	mg/L		0.1	SM 4500FC	11/27/2011 6:12:18 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.4	mg/L		0.1	EPA 353.2	11/29/2011 3:32:00 PM MEL
Sulfate	625	mg/L		1	EPA 300.0	11/28/2011 2:32:00 PM KO
Calcium	7	mg/L		1	EPA 200.7	11/28/2011 5:07:02 PM DG
Magnesium	2	mg/L		1	EPA 200.7	11/28/2011 5:07:02 PM DG
Potassium	5	mg/L		1	EPA 200.7	11/28/2011 5:07:02 PM DG
Sodium	559	mg/L		1	EPA 200.7	11/28/2011 5:07:02 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/1/2011 3:01:00 PM MB
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	11/27/2011 6:12:18 PM KO
Electrical Conductivity	2420	µmhos/cm		5	SM 2510B	11/27/2011 6:12:18 PM KO
Total Dissolved Solids (180)	1710	mg/L		10	SM 2540	11/23/2011 12:51:00 PM AF
<b>Data Quality</b>						
Cation Sum	24.99	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	24.07	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	1.88	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1530	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-004  
**ClientSample ID:** 19XX18  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/22/2011 11:45:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:07:02 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:32:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 3:32:00 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	11/28/2011 5:07:02 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 3:32:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:07:02 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 3:32:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 5:07:02 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:32:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:10:39 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:32:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:07:02 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:32:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 3:32:00 PM	MS
Uranium	0.0837	mg/L		0.0003	EPA 200.8	11/28/2011 3:32:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:32:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:07:02 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 6:05:04 PM	AB
Manganese	ND	mg/L		0.02	EPA 200.7	11/28/2011 6:05:04 PM	AB
<b>Radionuclides - Dissolved</b>							
Gross Alpha	207	pCi/L		5	SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Alpha Precision (±)	11	pCi/L			SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Beta	53.2	pCi/L		8	SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Beta Precision (±)	5.5	pCi/L			SM 7110B	12/18/2011 7:56:00 PM	SH
Radium 226	37.5	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM	SH
Radium 226 Precision (±)	0.8	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 5:54:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-005  
**ClientSample ID:** 22X-19  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/22/2011 12:30:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.69	s.u.			Field	11/22/2011 12:30:00 PM
Conductivity	2710	µmhos/cm			Field	11/22/2011 12:30:00 PM
Dissolved Oxygen	1.64	mg/L			Field	11/22/2011 12:30:00 PM
Dissolved Oxygen (pct)	15.0	%			Field	11/22/2011 12:30:00 PM
Turbidity	0.00	NTU			Field	11/22/2011 12:30:00 PM
Temperature	10.1	°C			Field	11/22/2011 12:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	470	mg/L		5	SM 2320B	11/27/2011 6:24:13 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	515	mg/L		5	SM 2320B	11/27/2011 6:24:13 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	29	mg/L		5	SM 2320B	11/27/2011 6:24:13 PM KO
Chloride	15	mg/L		1	EPA 300.0	11/28/2011 2:43:00 PM KO
Fluoride	0.6	mg/L		0.1	SM 4500FC	11/27/2011 6:24:13 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/29/2011 3:33:00 PM MEL
Sulfate	501	mg/L		1	EPA 300.0	11/28/2011 2:43:00 PM KO
Calcium	6	mg/L		1	EPA 200.7	11/28/2011 5:09:22 PM DG
Magnesium	2	mg/L		1	EPA 200.7	11/28/2011 5:09:22 PM DG
Potassium	5	mg/L		1	EPA 200.7	12/5/2011 1:00:27 PM DG
Sodium	508	mg/L		1	EPA 200.7	11/28/2011 5:09:22 PM DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	12/1/2011 3:02:00 PM MB
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	11/27/2011 6:24:13 PM KO
Electrical Conductivity	2110	µmhos/cm		5	SM 2510B	11/27/2011 6:24:13 PM KO
Total Dissolved Solids (180)	1450	mg/L		10	SM 2540	11/23/2011 12:52:00 PM AF
<b>Data Quality</b>						
Cation Sum	22.66	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	20.27	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	5.55	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1320	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-005  
**ClientSample ID:** 22X-19  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/22/2011 12:30:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:09:22 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:36:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 3:36:00 PM MS
Boron	0.4	mg/L		0.1	EPA 200.7	11/28/2011 5:09:22 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 3:36:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:09:22 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 3:36:00 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 5:09:22 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:36:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:12:25 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:36:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:09:22 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:36:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 3:36:00 PM MS
Uranium	0.0199	mg/L		0.0003	EPA 200.8	11/28/2011 3:36:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:36:00 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:09:22 PM DG
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 6:19:28 PM AB
Manganese	ND	mg/L		0.02	EPA 200.7	11/28/2011 6:19:28 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	30.1	pCi/L		6	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Alpha Precision (±)	5.4	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta	8.2	pCi/L		8	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta Precision (±)	4.8	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Radium 226	3.2	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 5:54:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 5:54:00 PM SH

These results apply only to the samples tested.

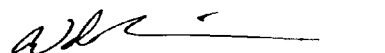
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-009  
**ClientSample ID:** ARH02  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 11:30:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.17	s.u.			Field	11/21/2011 11:30:00 AM
Conductivity	2800	µmhos/cm			Field	11/21/2011 11:30:00 AM
Dissolved Oxygen	4.65	mg/L			Field	11/21/2011 11:30:00 AM
Dissolved Oxygen (pct)	40.9	%			Field	11/21/2011 11:30:00 AM
Turbidity	79.8	NTU			Field	11/21/2011 11:30:00 AM
Temperature	8.8	°C			Field	11/21/2011 11:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	374	mg/L		5	SM 2320B	11/27/2011 7:16:51 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	456	mg/L		5	SM 2320B	11/27/2011 7:16:51 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	11/27/2011 7:16:51 PM KO
Chloride	16	mg/L		1	EPA 300.0	11/28/2011 4:26:00 PM KO
Fluoride	0.4	mg/L		0.1	SM 4500FC	11/27/2011 7:16:51 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/29/2011 3:37:00 PM MEL
Sulfate	824	mg/L		1	EPA 300.0	11/28/2011 4:26:00 PM KO
Calcium	177	mg/L		1	EPA 200.7	11/28/2011 5:32:54 PM DG
Magnesium	82	mg/L		1	EPA 200.7	11/28/2011 5:32:54 PM DG
Potassium	7	mg/L		1	EPA 200.7	11/28/2011 5:32:54 PM DG
Sodium	210	mg/L		1	EPA 200.7	11/28/2011 5:32:54 PM DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	12/1/2011 3:11:00 PM MB
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	11/27/2011 7:16:51 PM KO
Electrical Conductivity	2070	µmhos/cm		5	SM 2510B	11/27/2011 7:16:51 PM KO
Total Dissolved Solids (180)	1750	mg/L		10	SM 2540	11/23/2011 12:56:00 PM AF
<b>Data Quality</b>						
Cation Sum	24.88	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	25.10	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	0.43	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1540	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-009  
**ClientSample ID:** ARH02  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 11:30:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:32:54 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:20:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 4:20:00 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	11/28/2011 5:32:54 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 4:20:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:32:54 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 4:20:00 PM	MS
Iron	1.15	mg/L		0.05	EPA 200.7	11/28/2011 5:32:54 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:20:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:26:27 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:20:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:32:54 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:20:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 4:20:00 PM	MS
Uranium	0.0325	mg/L		0.0003	EPA 200.8	11/28/2011 4:20:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:20:00 PM	MS
Zinc	0.02	mg/L		0.01	EPA 200.7	11/28/2011 5:32:54 PM	DG
<b>Metals - Total</b>							
Iron	6.84	mg/L		0.05	EPA 200.7	11/28/2011 6:29:07 PM	AB
Manganese	1.19	mg/L		0.02	EPA 200.7	11/28/2011 6:29:07 PM	AB
<b>Radionuclides - Dissolved</b>							
Gross Alpha	15.2	pCi/L		6	SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Alpha Precision (±)	4.5	pCi/L			SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Beta	13.8	pCi/L		8	SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Beta Precision (±)	4.8	pCi/L			SM 7110B	12/18/2011 7:56:00 PM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 8:03:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 8:03:00 PM	SH

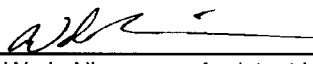
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-008  
**ClientSample ID:** ARL01  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 11:00:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.20	s.u.			Field	11/21/2011 11:00:00 AM
Conductivity	1616	µmhos/cm			Field	11/21/2011 11:00:00 AM
Dissolved Oxygen	1.26	mg/L			Field	11/21/2011 11:00:00 AM
Dissolved Oxygen (pct)	11.1	%			Field	11/21/2011 11:00:00 AM
Turbidity	7.89	NTU			Field	11/21/2011 11:00:00 AM
Temperature	9.1	°C			Field	11/21/2011 11:00:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	353	mg/L		5	SM 2320B	11/27/2011 7:06:20 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	431	mg/L		5	SM 2320B	11/27/2011 7:06:20 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	11/27/2011 7:06:20 PM KO
Chloride	6	mg/L		1	EPA 300.0	11/28/2011 4:15:00 PM KO
Fluoride	0.4	mg/L		0.1	SM 4500FC	11/27/2011 7:06:20 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/29/2011 3:36:00 PM MEL
Sulfate	527	mg/L		1	EPA 300.0	11/28/2011 4:15:00 PM KO
Calcium	91	mg/L		1	EPA 200.7	11/28/2011 5:18:46 PM DG
Magnesium	44	mg/L		1	EPA 200.7	11/28/2011 5:18:46 PM DG
Potassium	22	mg/L		1	EPA 200.7	11/28/2011 5:18:46 PM DG
Sodium	195	mg/L		1	EPA 200.7	11/28/2011 5:18:46 PM DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	12/1/2011 3:05:00 PM MB
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	11/27/2011 7:06:20 PM KO
Electrical Conductivity	1610	µmhos/cm		5	SM 2510B	11/27/2011 7:06:20 PM KO
Total Dissolved Solids (180)	1180	mg/L		10	SM 2540	11/23/2011 12:55:00 PM AF
<b>Data Quality</b>						
Cation Sum	17.21	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	18.20	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	2.81	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1100	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-008  
**ClientSample ID:** ARL01  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 11:00:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:18:46 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:50:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 3:50:00 PM MS
Boron	0.1	mg/L		0.1	EPA 200.7	11/28/2011 5:18:46 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 3:50:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:18:46 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 3:50:00 PM MS
Iron	2.69	mg/L		0.05	EPA 200.7	11/28/2011 5:18:46 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:50:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:17:42 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:50:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:18:46 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:50:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 3:50:00 PM MS
Uranium	0.0616	mg/L		0.0003	EPA 200.8	11/28/2011 3:50:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:50:00 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:18:46 PM DG
<b>Metals - Total</b>						
Iron	3.40	mg/L		0.05	EPA 200.7	11/28/2011 6:26:42 PM AB
Manganese	0.37	mg/L		0.02	EPA 200.7	11/28/2011 6:26:42 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	37.5	pCi/L		4	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Alpha Precision (±)	4.3	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta	29.8	pCi/L		5	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta Precision (±)	3.4	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Radium 226	1.3	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 8:03:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 8:03:00 PM SH

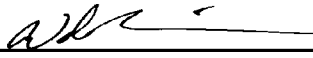
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-013  
**ClientSample ID:** CSWELL01  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 3:20:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.91	s.u.			Field	11/21/2011 3:20:00 PM
Conductivity	3240	µmhos/cm			Field	11/21/2011 3:20:00 PM
Dissolved Oxygen	1.39	mg/L			Field	11/21/2011 3:20:00 PM
Dissolved Oxygen (pct)	12.5	%			Field	11/21/2011 3:20:00 PM
Turbidity	0.92	NTU			Field	11/21/2011 3:20:00 PM
Temperature	9.7	°C			Field	11/21/2011 3:20:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	644	mg/L	5		SM 2320B	11/27/2011 8:00:30 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	737	mg/L	5		SM 2320B	11/27/2011 8:00:30 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	24	mg/L	5		SM 2320B	11/27/2011 8:00:30 PM KO
Chloride	13	mg/L	1		EPA 300.0	11/28/2011 5:12:00 PM KO
Fluoride	0.3	mg/L	0.1		SM 4500FC	11/27/2011 8:00:30 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.7	mg/L	0.1		EPA 353.2	11/29/2011 3:41:00 PM MEL
Sulfate	680	mg/L	1		EPA 300.0	11/28/2011 5:12:00 PM KO
Calcium	39	mg/L	1		EPA 200.7	11/28/2011 5:42:18 PM DG
Magnesium	30	mg/L	1		EPA 200.7	11/28/2011 5:42:18 PM DG
Potassium	12	mg/L	1		EPA 200.7	11/28/2011 5:42:18 PM DG
Sodium	501	mg/L	1		EPA 200.7	11/28/2011 5:42:18 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L	0.1		EPA 350.1	12/1/2011 3:15:00 PM MB
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	11/27/2011 8:00:30 PM KO
Electrical Conductivity	2480	µmhos/cm		5	SM 2510B	11/27/2011 8:00:30 PM KO
Total Dissolved Solids (180)	1830	mg/L		10	SM 2540	11/23/2011 1:01:00 PM AF
<b>Data Quality</b>						
Cation Sum	26.53	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	27.45	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	1.70	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1660	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-013  
**ClientSample ID:** CSWELL01  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 3:20:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:42:18 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:38:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 4:38:00 PM MS
Boron	0.4	mg/L		0.1	EPA 200.7	11/28/2011 5:42:18 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 4:38:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:42:18 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 4:38:00 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 5:42:18 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:38:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:38:45 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:38:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:42:18 PM DG
Selenium	0.006	mg/L		0.005	EPA 200.8	11/28/2011 4:38:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 4:38:00 PM MS
Uranium	0.0140	mg/L		0.0003	EPA 200.8	11/28/2011 4:38:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:38:00 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:42:18 PM DG
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 6:46:00 PM AB
Manganese	ND	mg/L		0.02	EPA 200.7	11/28/2011 6:46:00 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	12.7	pCi/L		5	SM 7110B	12/21/2011 8:42:00 PM SH
Gross Alpha Precision (±)	3.9	pCi/L			SM 7110B	12/21/2011 8:42:00 PM SH
Gross Beta	12.7	pCi/L		7	SM 7110B	12/21/2011 8:42:00 PM SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	12/21/2011 8:42:00 PM SH
Radium 226	0.4	pCi/L		0.2	SM 7500-Ra B	12/12/2011 6:36:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 6:36:00 PM SH
Radium 228	1.0	pCi/L		1	Ra-05	1/4/2012 5:51:00 PM SH
Radium 228 Precision (±)	1.1	pCi/L			Ra-05	1/4/2012 5:51:00 PM SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1111397-007  
**ClientSample ID:** DWWELL01  
**COC:** 131183

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)  
**WorkOrder:** S1111397  
**CollectionDate:** 11/22/2011 1:30:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.33	s.u.			Field	11/22/2011 1:30:00 PM
Conductivity	3310	µmhos/cm			Field	11/22/2011 1:30:00 PM
Dissolved Oxygen	1.74	mg/L			Field	11/22/2011 1:30:00 PM
Dissolved Oxygen (pct)	15.6	%			Field	11/22/2011 1:30:00 PM
Turbidity	5.89	NTU			Field	11/22/2011 1:30:00 PM
Temperature	9.2	°C			Field	11/22/2011 1:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	595	mg/L		5	SM 2320B	11/27/2011 6:56:06 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	673	mg/L		5	SM 2320B	11/27/2011 6:56:06 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	26	mg/L		5	SM 2320B	11/27/2011 6:56:06 PM KO
Chloride	11	mg/L		1	EPA 300.0	11/28/2011 4:03:00 PM KO
Fluoride	0.6	mg/L		0.1	SM 4500FC	11/27/2011 6:56:06 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/29/2011 3:35:00 PM MEL
Sulfate	667	mg/L		1	EPA 300.0	11/28/2011 4:03:00 PM KO
Calcium	14	mg/L		1	EPA 200.7	11/28/2011 5:14:04 PM DG
Magnesium	5	mg/L		1	EPA 200.7	11/28/2011 5:14:04 PM DG
Potassium	12	mg/L		1	EPA 200.7	11/28/2011 5:14:04 PM DG
Sodium	548	mg/L		1	EPA 200.7	11/28/2011 5:14:04 PM DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	12/1/2011 3:04:00 PM MB
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	11/27/2011 6:56:06 PM KO
Electrical Conductivity	2520	µmhos/cm		5	SM 2510B	11/27/2011 6:56:06 PM KO
Total Dissolved Solids (180)	1460	mg/L		10	SM 2540	11/23/2011 12:54:00 PM AF
<b>Data Quality</b>						
Cation Sum	25.28	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	26.12	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	1.64	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1610	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-007  
**ClientSample ID:** DWWELL01  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/22/2011 1:30:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:14:04 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:45:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 3:45:00 PM MS
Boron	0.4	mg/L		0.1	EPA 200.7	11/28/2011 5:14:04 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 3:45:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:14:04 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 3:45:00 PM MS
Iron	0.19	mg/L		0.05	EPA 200.7	11/28/2011 5:14:04 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:45:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:15:56 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:45:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:14:04 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:45:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 3:45:00 PM MS
Uranium	0.0005	mg/L		0.0003	EPA 200.8	11/28/2011 3:45:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:45:00 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:14:04 PM DG
<b>Metals - Total</b>						
Iron	1.47	mg/L		0.05	EPA 200.7	11/28/2011 6:24:18 PM AB
Manganese	0.03	mg/L		0.02	EPA 200.7	11/28/2011 6:24:18 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		6	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta	9.7	pCi/L		8	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta Precision (±)	4.7	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Radium 226	0.4	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 8:03:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 8:03:00 PM SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1111397-010  
**ClientSample ID:** HBWELL03  
**COC:** 131183

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)  
**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 1:00:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.51	s.u.			Field	11/21/2011 1:00:00 PM
Conductivity	1805	µmhos/cm			Field	11/21/2011 1:00:00 PM
Dissolved Oxygen	1.74	mg/L			Field	11/21/2011 1:00:00 PM
Dissolved Oxygen (pct)	15.4	%			Field	11/21/2011 1:00:00 PM
Turbidity	21.2	NTU			Field	11/21/2011 1:00:00 PM
Temperature	8.9	°C			Field	11/21/2011 1:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	525	mg/L		5	SM 2320B	11/27/2011 7:27:49 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	641	mg/L		5	SM 2320B	11/27/2011 7:27:49 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	11/27/2011 7:27:49 PM KO
Chloride	13	mg/L		1	EPA 300.0	11/28/2011 4:37:00 PM KO
Fluoride	0.3	mg/L		0.1	SM 4500FC	11/27/2011 7:27:49 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/29/2011 3:38:00 PM MEL
Sulfate	424	mg/L		1	EPA 300.0	11/28/2011 4:37:00 PM KO
Calcium	81	mg/L		1	EPA 200.7	11/28/2011 5:35:15 PM DG
Magnesium	41	mg/L		1	EPA 200.7	11/28/2011 5:35:15 PM DG
Potassium	21	mg/L		1	EPA 200.7	11/28/2011 5:35:15 PM DG
Sodium	292	mg/L		1	EPA 200.7	11/28/2011 5:35:15 PM DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	12/1/2011 3:12:00 PM MB
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	11/27/2011 7:27:49 PM KO
Electrical Conductivity	1740	µmhos/cm		5	SM 2510B	11/27/2011 7:27:49 PM KO
Total Dissolved Solids (180)	1190	mg/L		10	SM 2540	11/23/2011 12:57:00 PM AF
<b>Data Quality</b>						
Cation Sum	20.55	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	19.70	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	2.10	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1190	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-010  
**ClientSample ID:** HBWELL03  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 1:00:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:35:15 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:25:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 4:25:00 PM MS
Boron	0.1	mg/L		0.1	EPA 200.7	11/28/2011 5:35:15 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 4:25:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:35:15 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 4:25:00 PM MS
Iron	5.89	mg/L		0.05	EPA 200.7	11/28/2011 5:35:15 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:25:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:33:30 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:25:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:35:15 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:25:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 4:25:00 PM MS
Uranium	0.0018	mg/L		0.0003	EPA 200.8	11/28/2011 4:25:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:25:00 PM MS
Zinc	0.04	mg/L		0.01	EPA 200.7	11/28/2011 5:35:15 PM DG
<b>Metals - Total</b>						
Iron	9.34	mg/L		0.05	EPA 200.7	11/29/2011 4:10:38 PM DG
Manganese	0.23	mg/L		0.02	EPA 200.7	11/29/2011 4:10:38 PM DG
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		4	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta	18.2	pCi/L		5	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta Precision (±)	3.0	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Radium 226	0.6	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 8:03:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 8:03:00 PM SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1111397-011  
**ClientSample ID:** HBWELL04  
**COC:** 131183

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)  
**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 1:40:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.18	s.u.			Field	11/21/2011 1:40:00 PM
Conductivity	1691	µmhos/cm			Field	11/21/2011 1:40:00 PM
Dissolved Oxygen	1.53	mg/L			Field	11/21/2011 1:40:00 PM
Dissolved Oxygen (pct)	13.4	%			Field	11/21/2011 1:40:00 PM
Turbidity	5.46	NTU			Field	11/21/2011 1:40:00 PM
Temperature	8.4	°C			Field	11/21/2011 1:40:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	365	mg/L		5	SM 2320B	11/27/2011 7:38:15 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	445	mg/L		5	SM 2320B	11/27/2011 7:38:15 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	11/27/2011 7:38:15 PM KO
Chloride	16	mg/L		1	EPA 300.0	11/28/2011 4:49:00 PM KO
Fluoride	0.2	mg/L		0.1	SM 4500FC	11/27/2011 7:38:15 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.9	mg/L		0.1	EPA 353.2	11/29/2011 3:39:00 PM MEL
Sulfate	576	mg/L		1	EPA 300.0	11/28/2011 4:49:00 PM KO
Calcium	189	mg/L		1	EPA 200.7	11/28/2011 5:37:37 PM DG
Magnesium	60	mg/L		1	EPA 200.7	11/28/2011 5:37:37 PM DG
Potassium	8	mg/L		1	EPA 200.7	11/28/2011 5:37:37 PM DG
Sodium	132	mg/L		1	EPA 200.7	11/28/2011 5:37:37 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/1/2011 3:13:00 PM MB
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	11/27/2011 7:38:15 PM KO
Electrical Conductivity	1630	µmhos/cm		5	SM 2510B	11/27/2011 7:38:15 PM KO
Total Dissolved Solids (180)	1260	mg/L		10	SM 2540	11/23/2011 12:58:00 PM AF
<b>Data Quality</b>						
Cation Sum	20.25	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	19.82	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	1.08	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1200	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

These results apply only to the samples tested.

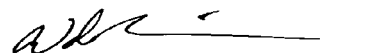
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-011  
**ClientSample ID:** HBWELL04  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 1:40:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:37:37 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:29:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 4:29:00 PM MS
Boron	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:37:37 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 4:29:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:37:37 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 4:29:00 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 5:37:37 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:29:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:35:15 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:29:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:37:37 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:29:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 4:29:00 PM MS
Uranium	0.0301	mg/L		0.0003	EPA 200.8	11/28/2011 4:29:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:29:00 PM MS
Zinc	0.02	mg/L		0.01	EPA 200.7	11/28/2011 5:37:37 PM DG
<b>Metals - Total</b>						
Iron	0.53	mg/L		0.05	EPA 200.7	11/28/2011 6:33:56 PM AB
Manganese	0.07	mg/L		0.02	EPA 200.7	11/28/2011 6:33:56 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	16.6	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM SH
Gross Alpha Precision (±)	3.0	pCi/L			SM 7110B	12/21/2011 8:42:00 PM SH
Gross Beta	10.3	pCi/L		4	SM 7110B	12/21/2011 8:42:00 PM SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	12/21/2011 8:42:00 PM SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	12/12/2011 6:36:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 6:36:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	1/4/2012 5:51:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/4/2012 5:51:00 PM SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-014  
**ClientSample ID:** HBWELL05  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 3:50:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.35	s.u.			Field	11/21/2011 3:50:00 PM
Conductivity	1698	µmhos/cm			Field	11/21/2011 3:50:00 PM
Dissolved Oxygen	2.29	mg/L			Field	11/21/2011 3:50:00 PM
Dissolved Oxygen (pct)	20.1	%			Field	11/21/2011 3:50:00 PM
Turbidity	3.86	NTU			Field	11/21/2011 3:50:00 PM
Temperature	8.9	°C			Field	11/21/2011 3:50:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	541	mg/L		5	SM 2320B	11/27/2011 8:11:10 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	660	mg/L		5	SM 2320B	11/27/2011 8:11:10 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	11/27/2011 8:11:10 PM KO
Chloride	6	mg/L		1	EPA 300.0	11/28/2011 5:23:00 PM KO
Fluoride	0.3	mg/L		0.1	SM 4500FC	11/27/2011 8:11:10 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.7	mg/L		0.1	EPA 353.2	11/29/2011 3:47:00 PM MEL
Sulfate	370	mg/L		1	EPA 300.0	11/28/2011 5:23:00 PM KO
Calcium	93	mg/L		1	EPA 200.7	11/28/2011 5:44:39 PM DG
Magnesium	37	mg/L		1	EPA 200.7	11/28/2011 5:44:39 PM DG
Potassium	9	mg/L		1	EPA 200.7	11/28/2011 5:44:39 PM DG
Sodium	271	mg/L		1	EPA 200.7	11/28/2011 5:44:39 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/1/2011 3:16:00 PM MB
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	11/27/2011 8:11:10 PM KO
Electrical Conductivity	1620	µmhos/cm		5	SM 2510B	11/27/2011 8:11:10 PM KO
Total Dissolved Solids (180)	1040	mg/L		10	SM 2540	11/23/2011 1:02:00 PM AF
<b>Data Quality</b>						
Cation Sum	19.73	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	18.76	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	2.51	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1110	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1111397-014  
**ClientSample ID:** HBWELL05  
**COC:** 131183

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)  
**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 3:50:00 PM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:44:39 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:43:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 4:43:00 PM MS
Boron	0.2	mg/L		0.1	EPA 200.7	11/28/2011 5:44:39 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 4:43:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:44:39 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 4:43:00 PM MS
Iron	0.39	mg/L		0.05	EPA 200.7	11/28/2011 5:44:39 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:43:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:40:31 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:43:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:44:39 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/28/2011 4:43:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 4:43:00 PM MS
Uranium	0.0119	mg/L		0.0003	EPA 200.8	11/28/2011 4:43:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 4:43:00 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:44:39 PM DG
<b>Metals - Total</b>						
Iron	21.3	mg/L		0.05	EPA 200.7	11/28/2011 6:50:49 PM AB
Manganese	0.07	mg/L		0.02	EPA 200.7	11/28/2011 6:50:49 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	9.2	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM SH
Gross Alpha Precision (±)	2.3	pCi/L			SM 7110B	12/21/2011 8:42:00 PM SH
Gross Beta	8.0	pCi/L		4	SM 7110B	12/21/2011 8:42:00 PM SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	12/21/2011 8:42:00 PM SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	12/12/2011 6:36:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 6:36:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	1/4/2012 5:51:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/4/2012 5:51:00 PM SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-005  
**ClientSample ID:** P17177W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 1:00:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.92	s.u.			Field	12/6/2011 1:00:00 PM
Conductivity	731	µmhos/cm			Field	12/6/2011 1:00:00 PM
Dissolved Oxygen	1.22	mg/L			Field	12/6/2011 1:00:00 PM
Dissolved Oxygen (pct)	10.8	%			Field	12/6/2011 1:00:00 PM
Turbidity	0.00	NTU			Field	12/6/2011 1:00:00 PM
Temperature	8.5	°C			Field	12/6/2011 1:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	306	mg/L		5	SM 2320B	12/11/2011 5:20:34 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	373	mg/L		5	SM 2320B	12/11/2011 5:20:34 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	12/11/2011 5:20:34 PM KO
Chloride	15	mg/L		1	EPA 300.0	12/9/2011 6:10:00 PM AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	12/11/2011 5:20:34 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	12/12/2011 12:20:00 PM MEL
Sulfate	55	mg/L		1	EPA 300.0	12/9/2011 6:10:00 PM AMB
Calcium	60	mg/L		1	EPA 200.7	12/8/2011 6:39:30 PM DG
Magnesium	17	mg/L		1	EPA 200.7	12/8/2011 6:39:30 PM DG
Potassium	5	mg/L		1	EPA 200.7	12/8/2011 6:39:30 PM DG
Sodium	71	mg/L		1	EPA 200.7	12/8/2011 6:39:30 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/8/2011 4:10:00 PM MB
<b>General Parameters</b>						
pH	7.9	s.u.		0.1	SM 4500 H B	12/11/2011 5:20:34 PM KO
Electrical Conductivity	684	µmhos/cm		5	SM 2510B	12/11/2011 5:20:34 PM KO
Total Dissolved Solids (180)	440	mg/L		10	SM 2540	12/8/2011 11:07:00 AM AF
<b>Data Quality</b>						
Cation Sum	7.62	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	7.71	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	0.58	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	410	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

These results apply only to the samples tested.

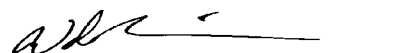
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-005  
**ClientSample ID:** P17177W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 1:00:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:39:30 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:52:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 4:52:00 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:39:30 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 4:52:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:39:30 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 4:52:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	12/8/2011 6:39:30 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:52:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:38:15 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:52:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:39:30 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:52:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 4:52:00 PM	MS
Uranium	0.0189	mg/L		0.0003	EPA 200.8	12/8/2011 4:52:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:52:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:39:30 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	12/12/2011 5:26:31 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	12/12/2011 5:26:31 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	5.8	pCi/L		2	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	7.4	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	1.3	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/10/2012 5:51:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/10/2012 5:51:00 PM	SH

## These results apply only to the samples tested.

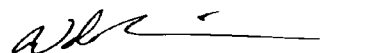
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-002  
**ClientSample ID:** P50113W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 11:10:00 AM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.67	s.u.			Field	12/6/2011 11:10:00 AM
Conductivity	1718	µmhos/cm			Field	12/6/2011 11:10:00 AM
Dissolved Oxygen	1.87	mg/L			Field	12/6/2011 11:10:00 AM
Dissolved Oxygen (pct)	16.1	%			Field	12/6/2011 11:10:00 AM
Turbidity	0.24	NTU			Field	12/6/2011 11:10:00 AM
Temperature	7.8	°C			Field	12/6/2011 11:10:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	524	mg/L	5		SM 2320B	12/11/2011 4:49:25 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	639	mg/L	5		SM 2320B	12/11/2011 4:49:25 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L	5		SM 2320B	12/11/2011 4:49:25 PM KO
Chloride	70	mg/L	1		EPA 300.0	12/9/2011 5:33:00 PM AMB
Fluoride	0.2	mg/L	0.1		SM 4500FC	12/11/2011 4:49:25 PM KO
Nitrogen, Nitrate-Nitrite (as N)	30.5	mg/L	0.1		EPA 353.2	12/12/2011 12:17:00 PM MEL
Sulfate	203	mg/L	1		EPA 300.0	12/9/2011 5:33:00 PM AMB
Calcium	118	mg/L	1		EPA 200.7	12/13/2011 12:38:50 PM DG
Magnesium	64	mg/L	1		EPA 200.7	12/13/2011 12:38:50 PM DG
Potassium	8	mg/L	1		EPA 200.7	12/13/2011 12:38:50 PM DG
Sodium	209	mg/L	1		EPA 200.7	12/13/2011 12:38:50 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L	0.1		EPA 350.1	12/8/2011 4:07:00 PM MB
<b>General Parameters</b>						
pH	7.8	s.u.		0.1	SM 4500 H B	12/11/2011 4:49:25 PM KO
Electrical Conductivity	1660	µmhos/cm		5	SM 2510B	12/11/2011 4:49:25 PM KO
Total Dissolved Solids (180)	1220	mg/L		10	SM 2540	12/8/2011 11:03:00 AM AF
<b>Data Quality</b>						
Cation Sum	20.42	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	18.88	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	3.91	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	1120	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-002  
**ClientSample ID:** P50113W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 11:10:00 AM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:18:13 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:39:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 4:39:00 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:18:13 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 4:39:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:18:13 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 4:39:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	12/8/2011 6:18:13 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:39:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:32:58 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:39:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:18:13 PM	DG
Selenium	0.022	mg/L		0.005	EPA 200.8	12/8/2011 4:39:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 4:39:00 PM	MS
Uranium	0.181	mg/L		0.0003	EPA 200.8	12/8/2011 4:39:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:39:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:18:13 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	12/12/2011 5:09:58 PM	DG
Manganese	0.50	mg/L		0.02	EPA 200.7	12/12/2011 5:09:58 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	73.3	pCi/L		4	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	5.8	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	33.1	pCi/L		5	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	3.4	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	0.5	pCi/L		0.2	SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/4/2012 8:07:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/4/2012 8:07:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-008  
**ClientSample ID:** P61006W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/7/2011 12:30:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.32	s.u.			Field	12/7/2011 12:30:00 PM
Conductivity	1064	µmhos/cm			Field	12/7/2011 12:30:00 PM
Dissolved Oxygen	1.88	mg/L			Field	12/7/2011 12:30:00 PM
Dissolved Oxygen (pct)	16.5	%			Field	12/7/2011 12:30:00 PM
Turbidity	1.02	NTU			Field	12/7/2011 12:30:00 PM
Temperature	8.8	°C			Field	12/7/2011 12:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	490	mg/L		5	SM 2320B	12/11/2011 5:51:31 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	597	mg/L		5	SM 2320B	12/11/2011 5:51:31 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	12/11/2011 5:51:31 PM KO
Chloride	2	mg/L		1	EPA 300.0	12/9/2011 7:37:00 PM AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	12/11/2011 5:51:31 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	12/12/2011 12:24:00 PM MEL
Sulfate	78	mg/L		1	EPA 300.0	12/9/2011 7:37:00 PM AMB
Calcium	18	mg/L		1	EPA 200.7	12/8/2011 6:46:36 PM DG
Magnesium	9	mg/L		1	EPA 200.7	12/8/2011 6:46:36 PM DG
Potassium	9	mg/L		1	EPA 200.7	12/8/2011 6:46:36 PM DG
Sodium	221	mg/L		1	EPA 200.7	12/8/2011 6:46:36 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/8/2011 4:18:00 PM MB
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	12/11/2011 5:51:31 PM KO
Electrical Conductivity	1010	µmhos/cm		5	SM 2510B	12/11/2011 5:51:31 PM KO
Total Dissolved Solids (180)	650	mg/L		10	SM 2540	12/8/2011 11:10:00 AM AF
<b>Data Quality</b>						
Cation Sum	11.48	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	11.46	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	0.07	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	630	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

## These results apply only to the samples tested.

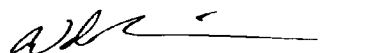
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-008  
**ClientSample ID:** P61006W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/7/2011 12:30:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:46:36 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	12/8/2011 5:15:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 5:15:00 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	12/8/2011 6:46:36 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 5:15:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:46:36 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 5:15:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	12/8/2011 6:46:36 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 5:15:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:52:14 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 5:15:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:46:36 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	12/8/2011 5:15:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 5:15:00 PM	MS
Uranium	0.0023	mg/L		0.0003	EPA 200.8	12/8/2011 5:15:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 5:15:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:46:36 PM	DG
<b>Metals - Total</b>							
Iron	0.18	mg/L		0.05	EPA 200.7	12/12/2011 5:38:19 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	12/12/2011 5:38:19 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	10.1	pCi/L		4	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	0.8	pCi/L		0.2	SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/10/2012 5:51:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/10/2012 5:51:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-007  
**ClientSample ID:** P61007W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/7/2011 12:00:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.94	s.u.			Field	12/7/2011 12:00:00 PM
Conductivity	1142	µmhos/cm			Field	12/7/2011 12:00:00 PM
Dissolved Oxygen	2.02	mg/L			Field	12/7/2011 12:00:00 PM
Dissolved Oxygen (pct)	16.7	%			Field	12/7/2011 12:00:00 PM
Turbidity	29.4	NTU			Field	12/7/2011 12:00:00 PM
Temperature	6.3	°C			Field	12/7/2011 12:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	521	mg/L		5	SM 2320B	12/11/2011 5:41:02 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	603	mg/L		5	SM 2320B	12/11/2011 5:41:02 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	16	mg/L		5	SM 2320B	12/11/2011 5:41:02 PM KO
Chloride	2	mg/L		1	EPA 300.0	12/9/2011 7:25:00 PM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	12/11/2011 5:41:02 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.3	mg/L		0.1	EPA 353.2	12/12/2011 12:23:00 PM MEL
Sulfate	86	mg/L		1	EPA 300.0	12/9/2011 7:25:00 PM AMB
Calcium	3	mg/L		1	EPA 200.7	12/8/2011 6:44:14 PM DG
Magnesium	2	mg/L		1	EPA 200.7	12/8/2011 6:44:14 PM DG
Potassium	5	mg/L		1	EPA 200.7	12/8/2011 6:44:14 PM DG
Sodium	280	mg/L		1	EPA 200.7	12/8/2011 6:44:14 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/8/2011 4:17:00 PM MB
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	12/11/2011 5:41:02 PM KO
Electrical Conductivity	1110	µmhos/cm		5	SM 2510B	12/11/2011 5:41:02 PM KO
Total Dissolved Solids (180)	720	mg/L		10	SM 2540	12/8/2011 11:09:00 AM AF
<b>Data Quality</b>						
Cation Sum	12.61	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	12.30	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	1.26	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	690	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-007  
**ClientSample ID:** P61007W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/7/2011 12:00:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:44:14 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	12/8/2011 5:10:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 5:10:00 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	12/8/2011 6:44:14 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 5:10:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:44:14 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 5:10:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	12/8/2011 6:44:14 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 5:10:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:50:29 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 5:10:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:44:14 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	12/8/2011 5:10:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 5:10:00 PM	MS
Uranium	0.0051	mg/L		0.0003	EPA 200.8	12/8/2011 5:10:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 5:10:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:44:14 PM	DG
<b>Metals - Total</b>							
Iron	1.50	mg/L		0.05	EPA 200.7	12/12/2011 5:35:58 PM	DG
Manganese	ND	mg/L		0.02	EPA 200.7	12/12/2011 5:35:58 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.9	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	5.0	pCi/L		4	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/10/2012 5:51:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/10/2012 5:51:00 PM	SH

## These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-004  
**ClientSample ID:** P71108W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 12:10:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.66	s.u.			Field	12/6/2011 12:10:00 PM
Conductivity	1889	µmhos/cm			Field	12/6/2011 12:10:00 PM
Dissolved Oxygen	1.49	mg/L			Field	12/6/2011 12:10:00 PM
Dissolved Oxygen (pct)	12.9	%			Field	12/6/2011 12:10:00 PM
Turbidity	0.46	NTU			Field	12/6/2011 12:10:00 PM
Temperature	7.9	°C			Field	12/6/2011 12:10:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	588	mg/L		5	SM 2320B	12/11/2011 5:10:05 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	718	mg/L		5	SM 2320B	12/11/2011 5:10:05 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	12/11/2011 5:10:05 PM KO
Chloride	9	mg/L		1	EPA 300.0	12/9/2011 5:58:00 PM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	12/11/2011 5:10:05 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.3	mg/L		0.1	EPA 353.2	12/12/2011 12:19:00 PM MEL
Sulfate	498	mg/L		1	EPA 300.0	12/9/2011 5:58:00 PM AMB
Calcium	65	mg/L		1	EPA 200.7	12/13/2011 12:45:12 PM DG
Magnesium	68	mg/L		1	EPA 200.7	12/13/2011 12:45:12 PM DG
Potassium	10	mg/L		1	EPA 200.7	12/13/2011 12:45:12 PM DG
Sodium	346	mg/L		1	EPA 200.7	12/13/2011 12:45:12 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/8/2011 4:09:00 PM MB
<b>General Parameters</b>						
pH	7.9	s.u.		0.1	SM 4500 H B	12/11/2011 5:10:05 PM KO
Electrical Conductivity	1860	µmhos/cm		5	SM 2510B	12/11/2011 5:10:05 PM KO
Total Dissolved Solids (180)	1380	mg/L		10	SM 2540	12/8/2011 11:05:00 AM AF
<b>Data Quality</b>						
Cation Sum	24.14	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	22.43	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	3.68	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	1350	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-004  
**ClientSample ID:** P71108W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 12:10:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:25:19 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:48:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 4:48:00 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	12/8/2011 6:25:19 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 4:48:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:25:19 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 4:48:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	12/8/2011 6:25:19 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:48:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:36:29 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:48:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:25:19 PM	DG
Selenium	0.006	mg/L		0.005	EPA 200.8	12/8/2011 4:48:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 4:48:00 PM	MS
Uranium	0.0974	mg/L		0.0003	EPA 200.8	12/8/2011 4:48:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:48:00 PM	MS
Zinc	0.06	mg/L		0.01	EPA 200.7	12/8/2011 6:25:19 PM	DG
<b>Metals - Total</b>							
Iron	0.19	mg/L		0.05	EPA 200.7	12/12/2011 5:21:47 PM	DG
Manganese	0.29	mg/L		0.02	EPA 200.7	12/12/2011 5:21:47 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	54.4	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	4.9	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	22.7	pCi/L		5	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	3.3	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/4/2012 8:07:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/4/2012 8:07:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-001  
**ClientSample ID:** P84665W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 10:45:00 AM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.71	s.u.			Field	12/6/2011 10:45:00 AM
Conductivity	1078	µmhos/cm			Field	12/6/2011 10:45:00 AM
Dissolved Oxygen	3.38	mg/L			Field	12/6/2011 10:45:00 AM
Dissolved Oxygen (pct)	29.0	%			Field	12/6/2011 10:45:00 AM
Turbidity	3.75	NTU			Field	12/6/2011 10:45:00 AM
Temperature	7.3	°C			Field	12/6/2011 10:45:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	455	mg/L		5	SM 2320B	12/11/2011 4:39:39 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	555	mg/L		5	SM 2320B	12/11/2011 4:39:39 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	12/11/2011 4:39:39 PM KO
Chloride	13	mg/L		1	EPA 300.0	12/9/2011 5:21:00 PM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	12/11/2011 4:39:39 PM KO
Nitrogen, Nitrate-Nitrite (as N)	2.1	mg/L		0.1	EPA 353.2	12/12/2011 12:15:00 PM MEL
Sulfate	119	mg/L		1	EPA 300.0	12/9/2011 5:21:00 PM AMB
Calcium	88	mg/L		1	EPA 200.7	12/8/2011 6:15:51 PM DG
Magnesium	42	mg/L		1	EPA 200.7	12/8/2011 6:15:51 PM DG
Potassium	8	mg/L		1	EPA 200.7	12/8/2011 6:15:51 PM DG
Sodium	88	mg/L		1	EPA 200.7	12/8/2011 6:15:51 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/8/2011 4:06:00 PM MB
<b>General Parameters</b>						
pH	7.9	s.u.		0.1	SM 4500 H B	12/11/2011 4:39:39 PM KO
Electrical Conductivity	1020	µmhos/cm		5	SM 2510B	12/11/2011 4:39:39 PM KO
Total Dissolved Solids (180)	690	mg/L		10	SM 2540	12/8/2011 11:02:00 AM AF
<b>Data Quality</b>						
Cation Sum	11.89	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	12.10	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	0.89	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	640	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-001  
**ClientSample ID:** P84665W  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 10:45:00 AM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:15:51 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:34:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 4:34:00 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:15:51 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 4:34:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:15:51 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 4:34:00 PM	MS
Iron	0.12	mg/L		0.05	EPA 200.7	12/8/2011 6:15:51 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:34:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:25:58 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:34:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:15:51 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:34:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 4:34:00 PM	MS
Uranium	0.0576	mg/L		0.0003	EPA 200.8	12/8/2011 4:34:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:34:00 PM	MS
Zinc	0.06	mg/L		0.01	EPA 200.7	12/8/2011 6:15:51 PM	DG
<b>Metals - Total</b>							
Iron	1.84	mg/L		0.05	EPA 200.7	12/12/2011 5:07:37 PM	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	12/12/2011 5:07:37 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	27.8	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	3.3	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	14.5	pCi/L		4	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	2.6	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	0.5	pCi/L		0.2	SM 7500-Ra B	12/22/2011 4:05:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/22/2011 4:05:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/4/2012 5:51:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/4/2012 5:51:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-003  
**ClientSample ID:** PHWELL01 (P22584P)  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 10:30:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.09	s.u.			Field	11/21/2011 10:30:00 AM
Conductivity	1036	µmhos/cm			Field	11/21/2011 10:30:00 AM
Dissolved Oxygen	2.70	mg/L			Field	11/21/2011 10:30:00 AM
Dissolved Oxygen (pct)	23.9	%			Field	11/21/2011 10:30:00 AM
Turbidity	2.21	NTU			Field	11/21/2011 10:30:00 AM
Temperature	9.0	°C			Field	11/21/2011 10:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	445	mg/L		5	SM 2320B	11/27/2011 6:01:06 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	463	mg/L		5	SM 2320B	11/27/2011 6:01:06 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	39	mg/L		5	SM 2320B	11/27/2011 6:01:06 PM KO
Chloride	9	mg/L		1	EPA 300.0	11/28/2011 2:21:00 PM KO
Fluoride	0.4	mg/L		0.1	SM 4500FC	11/27/2011 6:01:06 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	11/29/2011 3:26:00 PM MEL
Sulfate	57	mg/L		1	EPA 300.0	11/28/2011 2:21:00 PM KO
Calcium	2	mg/L		1	EPA 200.7	11/28/2011 5:04:42 PM DG
Magnesium	ND	mg/L		1	EPA 200.7	11/28/2011 5:04:42 PM DG
Potassium	5	mg/L		1	EPA 200.7	11/28/2011 5:04:42 PM DG
Sodium	221	mg/L		1	EPA 200.7	11/28/2011 5:04:42 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/1/2011 3:00:00 PM MB
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	11/27/2011 6:01:06 PM KO
Electrical Conductivity	980	µmhos/cm		5	SM 2510B	11/27/2011 6:01:06 PM KO
Total Dissolved Solids (180)	610	mg/L		10	SM 2540	11/23/2011 12:50:00 PM AF
<b>Data Quality</b>						
Cation Sum	9.84	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	10.36	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	2.60	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	560	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-003  
**ClientSample ID:** PHWELL01 (P22584P)  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 10:30:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:04:42 PM	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	11/28/2011 3:27:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 3:27:00 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	11/28/2011 5:04:42 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 3:27:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:04:42 PM	DG
Copper	0.02	mg/L		0.01	EPA 200.8	11/28/2011 3:27:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 5:04:42 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:27:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:08:54 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:27:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:04:42 PM	DG
Selenium	0.028	mg/L		0.005	EPA 200.8	11/28/2011 3:27:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 3:27:00 PM	MS
Uranium	0.0168	mg/L		0.0003	EPA 200.8	11/28/2011 3:27:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:27:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:04:42 PM	DG
<b>Metals - Total</b>							
Iron	0.30	mg/L		0.05	EPA 200.7	11/28/2011 6:00:16 PM	AB
Manganese	ND	mg/L		0.02	EPA 200.7	11/28/2011 6:00:16 PM	AB
<b>Radionuclides - Dissolved</b>							
Gross Alpha	19.1	pCi/L		2	SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Alpha Precision (±)	2.3	pCi/L			SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Beta	5.9	pCi/L		3	SM 7110B	12/18/2011 7:56:00 PM	SH
Gross Beta Precision (±)	1.6	pCi/L			SM 7110B	12/18/2011 7:56:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 5:54:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 5:54:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-003  
**ClientSample ID:** SBWELL01  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 11:45:00 AM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.14	s.u.			Field	12/6/2011 11:45:00 AM
Conductivity	1208	µmhos/cm			Field	12/6/2011 11:45:00 AM
Dissolved Oxygen	1.51	mg/L			Field	12/6/2011 11:45:00 AM
Dissolved Oxygen (pct)	13.0	%			Field	12/6/2011 11:45:00 AM
Turbidity	3.13	NTU			Field	12/6/2011 11:45:00 AM
Temperature	7.7	°C			Field	12/6/2011 11:45:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	527	mg/L		5	SM 2320B	12/11/2011 4:59:56 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	597	mg/L		5	SM 2320B	12/11/2011 4:59:56 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	23	mg/L		5	SM 2320B	12/11/2011 4:59:56 PM KO
Chloride	2	mg/L		1	EPA 300.0	12/9/2011 5:45:00 PM AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	12/11/2011 4:59:56 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.9	mg/L		0.1	EPA 353.2	12/12/2011 12:18:00 PM MEL
Sulfate	98	mg/L		1	EPA 300.0	12/9/2011 5:45:00 PM AMB
Calcium	2	mg/L		1	EPA 200.7	12/8/2011 6:20:35 PM DG
Magnesium	ND	mg/L		1	EPA 200.7	12/8/2011 6:20:35 PM DG
Potassium	3	mg/L		1	EPA 200.7	12/8/2011 6:20:35 PM DG
Sodium	279	mg/L		1	EPA 200.7	12/8/2011 6:20:35 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/8/2011 4:08:00 PM MB
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	12/11/2011 4:59:56 PM KO
Electrical Conductivity	1170	µmhos/cm		5	SM 2510B	12/11/2011 4:59:56 PM KO
Total Dissolved Solids (180)	760	mg/L		10	SM 2540	12/8/2011 11:04:00 AM AF
<b>Data Quality</b>						
Cation Sum	12.30	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	12.68	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	1.51	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	700	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-003  
**ClientSample ID:** SBWELL01  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 11:45:00 AM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:20:35 PM	DG
Arsenic	0.007	mg/L		0.005	EPA 200.8	12/8/2011 4:43:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 4:43:00 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	12/8/2011 6:20:35 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 4:43:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:20:35 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 4:43:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	12/8/2011 6:20:35 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:43:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:34:43 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:43:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:20:35 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:43:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 4:43:00 PM	MS
Uranium	0.0012	mg/L		0.0003	EPA 200.8	12/8/2011 4:43:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:43:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:20:35 PM	DG
<b>Metals - Total</b>							
Iron	0.72	mg/L		0.05	EPA 200.7	12/12/2011 5:19:25 PM	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	12/12/2011 5:19:25 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	ND	pCi/L		4	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/4/2012 8:07:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/4/2012 8:07:00 PM	SH

These results apply only to the samples tested.

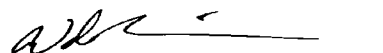
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-006  
**ClientSample ID:** SBWELL02  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 1:30:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.93	s.u.			Field	12/6/2011 1:30:00 PM
Conductivity	789	µmhos/cm			Field	12/6/2011 1:30:00 PM
Dissolved Oxygen	1.42	mg/L			Field	12/6/2011 1:30:00 PM
Dissolved Oxygen (pct)	12.4	%			Field	12/6/2011 1:30:00 PM
Turbidity	0.17	NTU			Field	12/6/2011 1:30:00 PM
Temperature	8.4	°C			Field	12/6/2011 1:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	380	mg/L		5	SM 2320B	12/11/2011 5:30:06 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	464	mg/L		5	SM 2320B	12/11/2011 5:30:06 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	12/11/2011 5:30:06 PM KO
Chloride	2	mg/L		1	EPA 300.0	12/9/2011 6:23:00 PM AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	12/11/2011 5:30:06 PM KO
Nitrogen, Nitrate-Nitrite (as N)	0.9	mg/L		0.1	EPA 353.2	12/12/2011 12:22:00 PM MEL
Sulfate	39	mg/L		1	EPA 300.0	12/9/2011 6:23:00 PM AMB
Calcium	36	mg/L		1	EPA 200.7	12/8/2011 6:41:52 PM DG
Magnesium	25	mg/L		1	EPA 200.7	12/8/2011 6:41:52 PM DG
Potassium	16	mg/L		1	EPA 200.7	12/8/2011 6:41:52 PM DG
Sodium	101	mg/L		1	EPA 200.7	12/8/2011 6:41:52 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	12/8/2011 4:11:00 PM MB
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	12/11/2011 5:30:06 PM KO
Electrical Conductivity	729	µmhos/cm		5	SM 2510B	12/11/2011 5:30:06 PM KO
Total Dissolved Solids (180)	460	mg/L		10	SM 2540	12/8/2011 11:08:00 AM AF
<b>Data Quality</b>						
Cation Sum	8.68	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Anion Sum	8.52	meq/L		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Cation-Anion Balance (± 5%)	0.92	%		0.01	SM 1030E	12/14/2011 8:57:34 AM KO
Solids, Total Dissolved (Calc)	450	mg/L		10	SM 1030E	12/14/2011 8:57:34 AM KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 1/13/2012  
**Report ID:** S1112147001

**ProjectName:** Ross  
**Lab ID:** S1112147-006  
**ClientSample ID:** SBWELL02  
**COC:** 131184 131185

**WorkOrder:** S1112147  
**CollectionDate:** 12/6/2011 1:30:00 PM  
**DateReceived:** 12/7/2011 4:10:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	12/8/2011 6:41:52 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:57:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	12/8/2011 4:57:00 PM	MS
Boron	0.1	mg/L		0.1	EPA 200.7	12/8/2011 6:41:52 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	12/8/2011 4:57:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:41:52 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	12/8/2011 4:57:00 PM	MS
Iron	0.35	mg/L		0.05	EPA 200.7	12/8/2011 6:41:52 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:57:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/13/2011 8:43:29 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:57:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:41:52 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	12/8/2011 4:57:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	12/8/2011 4:57:00 PM	MS
Uranium	0.0050	mg/L		0.0003	EPA 200.8	12/8/2011 4:57:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	12/8/2011 4:57:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	12/8/2011 6:41:52 PM	DG
<b>Metals - Total</b>							
Iron	0.55	mg/L		0.05	EPA 200.7	12/12/2011 5:33:36 PM	DG
Manganese	0.06	mg/L		0.02	EPA 200.7	12/12/2011 5:33:36 PM	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.7	pCi/L		2	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta	13.3	pCi/L		3	SM 7110B	12/21/2011 8:42:00 PM	SH
Gross Beta Precision (±)	1.4	pCi/L			SM 7110B	12/21/2011 8:42:00 PM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/23/2011 4:48:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/10/2012 5:51:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/10/2012 5:51:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-002  
**ClientSample ID:** TW01  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 9:30:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.99	s.u.			Field	11/21/2011 9:30:00 AM
Conductivity	2570	µmhos/cm			Field	11/21/2011 9:30:00 AM
Dissolved Oxygen	1.72	mg/L			Field	11/21/2011 9:30:00 AM
Dissolved Oxygen (pct)	27.2	%			Field	11/21/2011 9:30:00 AM
Turbidity	0.79	NTU			Field	11/21/2011 9:30:00 AM
Temperature	12.0	°C			Field	11/21/2011 9:30:00 AM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	686	mg/L	5		SM 2320B	11/27/2011 5:51:27 PM KO
Alkalinity, Bicarbonate as HCO <sub>3</sub>	772	mg/L	5		SM 2320B	11/27/2011 5:51:27 PM KO
Alkalinity, Carbonate as CO <sub>3</sub>	32	mg/L	5		SM 2320B	11/27/2011 5:51:27 PM KO
Chloride	7	mg/L	1		EPA 300.0	11/28/2011 2:09:00 PM KO
Fluoride	1.2	mg/L	0.1		SM 4500FC	11/27/2011 5:51:27 PM KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L	0.1		EPA 353.2	11/29/2011 3:25:00 PM MEL
Sulfate	341	mg/L	1		EPA 300.0	11/28/2011 2:09:00 PM KO
Calcium	8	mg/L	1		EPA 200.7	11/28/2011 5:02:21 PM DG
Magnesium	4	mg/L	1		EPA 200.7	11/28/2011 5:02:21 PM DG
Potassium	9	mg/L	1		EPA 200.7	11/28/2011 5:02:21 PM DG
Sodium	492	mg/L	1		EPA 200.7	11/28/2011 5:02:21 PM DG
Nitrogen, Ammonia (As N)	0.2	mg/L	0.1		EPA 350.1	12/1/2011 2:59:00 PM MB
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	11/27/2011 5:51:27 PM KO
Electrical Conductivity	2010	µmhos/cm		5	SM 2510B	11/27/2011 5:51:27 PM KO
Total Dissolved Solids (180)	1410	mg/L		10	SM 2540	11/23/2011 12:48:00 PM AF
<b>Data Quality</b>						
Cation Sum	22.38	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Anion Sum	21.06	meq/L		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Cation-Anion Balance (± 5%)	3.04	%		0.01	SM 1030E	12/8/2011 8:41:23 AM KO
Solids, Total Dissolved (Calc)	1270	mg/L		10	SM 1030E	12/8/2011 8:41:23 AM KO

## These results apply only to the samples tested.

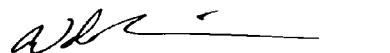
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/7/2012  
**Report ID:** S1111397002  
(Replaces S1111397001)

**ProjectName:** Ross  
**Lab ID:** S1111397-002  
**ClientSample ID:** TW01  
**COC:** 131183

**WorkOrder:** S1111397  
**CollectionDate:** 11/21/2011 9:30:00 AM  
**DateReceived:** 11/22/2011 4:50:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	0.3	mg/L		0.1	EPA 200.7	11/28/2011 5:02:21 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/28/2011 3:23:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	11/28/2011 3:23:00 PM MS
Boron	0.5	mg/L		0.1	EPA 200.7	11/28/2011 5:02:21 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/28/2011 3:23:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:02:21 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	11/28/2011 3:23:00 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	11/28/2011 5:02:21 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:23:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	12/1/2011 11:07:08 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:23:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:02:21 PM DG
Selenium	0.012	mg/L		0.005	EPA 200.8	11/28/2011 3:23:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	11/28/2011 3:23:00 PM MS
Uranium	ND	mg/L		0.0003	EPA 200.8	11/28/2011 3:23:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/28/2011 3:23:00 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/28/2011 5:02:21 PM DG
<b>Metals - Total</b>						
Iron	0.11	mg/L		0.05	EPA 200.7	11/28/2011 5:57:52 PM AB
Manganese	ND	mg/L		0.02	EPA 200.7	11/28/2011 5:57:52 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	4.8	pCi/L		3	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Alpha Precision (±)	2.4	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta	ND	pCi/L		8	SM 7110B	12/18/2011 7:56:00 PM SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	12/18/2011 7:56:00 PM SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	12/12/2011 3:44:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	1/3/2012 5:54:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/3/2012 5:54:00 PM SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 19XX18 Date: 3-15-12 Time: 0950

**Landowner**

Name: Merit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 18

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Industrial  
~~Stock~~ ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P67747W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.82

Cond. 3.03 mS

Temp. °C 11.2

Turbidity (ntu) 0.83

D.O. (mg/L) 4.56 / 42.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - fizzy - no odor - 5.  
sample bottles - LCF

COC # 143918

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 22X-19 Date: 3-15-12 Time: 1030

**Landowner**

Name: Merit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SENW

SEC 19

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

~~Industrial~~ ✓  
~~Stock~~

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50917W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.97

Cond. 1936 <sup>µ</sup>S

Temp. °C 11.3

Turbidity (ntu) 0.53

D.O. (mg/L) 1.29/12.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - fizzy - no odor - 5 sample  
bottles - LCF

COC# 143918

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: ARH02 Date: 2-27-12 Time: 1215

**Landowner**

Name: Reynolds

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 7.62

Cond. 2.78 uS

Temp. °C 6.8

Turbidity (ntu) 0.88

D.O. (mg/L) 2.35 / 20.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear, no odor, no 4.14  
5 sample bottles

LCF  
COC # 143915

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: CSWELL01 Date: 3-16-12 Time: 1100

**Landowner**

Name: Strong/Oswell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr nwnw

SEC 20

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P132537W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.37

Cond. 3.30 mS

Temp. °C 6.7

Turbidity (ntu) 0.00

D.O. (mg/L) 1.98/17.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water Clear - no odor - 5 sample bottles - LCF

\* Talked to Gardell and he said he would like results sent to him as well as Camell  
COC# 143918

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: CSWELL03 Date: 3-16-12 Time: 1200

Landowner

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NE NE

SEC 30

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P619W

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH 7.97

Cond. 628 uS

Temp. °C ~~10.2~~ 10.3

Turbidity (ntu) 0.12

D.O. (mg/L) 1.37/12.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor - 5 sample bottles - LCF

COC# 131192



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: DW WELL 01 Date: 2-27-12 Time: 1430

**Landowner**

Name: Wood

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNW

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 8.59

Cond. 3.08 ms

Temp. °C 9.0

Turbidity (ntu) 4.32

D.O. (mg/L) 2.83 / 25.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5 sample  
bottles - no 4.14

LCF

CDC# 143915

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWEL04 Date: 2-27-12 Time: 1300

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7326P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.64

Cond. 1672  $\mu$ S

Temp. °C 7.3

Turbidity (ntu) 0.00

D.O. (mg/L) 2.65 / 22.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor, 5 sample bottles, no 4.14

LCF  
COC# 143915

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELL05 Date: 2-27-12 Time: 1345

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7430P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.79

Cond. 1673  $\mu$ S

Temp. °C 8.3

Turbidity (ntu) 28.1

D.O. (mg/L) 2.76/24.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly turbid - no odor,  
5 sample bottles, no 4.14

HCF  
COC# 143915

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P17177W Date: 3-14-12 Time: 1500

**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: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.14

Cond. 767  $\mu$ S

Temp. °C 9.6

Turbidity (ntu) 0.00

D.O. (mg/L) 1.44/12.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stuck well - water clear - no odor -  
5 sample wells - well by creek East of Dallas  
and Anna's house. - LCF

CDC# 143916

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P42868W Date: 3-28-12 Time: 1315

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWSE

SEC 14

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P42868W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 9.03

Cond. 907  $\mu$ S

Temp. °C 8.5

Turbidity (ntu) 3.68

D.O. (mg/L) 1.73 / 15.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water Clear - no odor - 5 sample bottles

LCF  
COC# 143919

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P50113W Date: 3-14-12 Time: 1300

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50113W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.75

Cond. 1498  $\mu$ S

Temp. °C 8.2

Turbidity (ntu) 0.16

D.O. (mg/L) 1.88/16.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stock tank well below main facility by  
Creek - Water clear - no odor - 5 sample bottles -  
LCF

COC# 143916

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61006W Date: 3-28-12 Time: 1430

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61006W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.2

Cond. 994  $\mu$ S

Temp. °C 10.4

Turbidity (ntu) 4.00

D.O. (mg/L) 1.42 / 13.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5 sample bottles

LCE  
COC# 143919

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61007W Date: 3-28-12 Time: 1350

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61007W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.72

Cond. 1088  $\mu$ S

Temp. °C 10.1

Turbidity (ntu) 9.78

D.O. (mg/L) 1.31/12.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5 sample bottles

LCF  
COC# 143919



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P 71108W-RAW Date: 3-14-12 Time: 1430

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SENE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P 71108W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.70

Cond. 1796  $\mu$ S

Temp. °C 6.6

Turbidity (ntu) 1.84

D.O. (mg/L) 1.30 / 10.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Dallas and Annis house well - sampled  
at frost free hydrant (RAW) - water clear - no  
odor - 5 sample bottles - LCF

COC # 143916

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P84 665W Date: 3-14-12 Time: 1230

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWNW

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P84 665W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.66

Cond. 1090  $\mu$ S

Temp. °C 8.0

Turbidity (ntu) 0.86

D.O. (mg/L) 2.63 / 23.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Windmill well - water clear - no  
odor - 5 sample bottles - LCF

COC # 143916

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SBWELL 01 Date: 3-14-12 Time: 1345

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

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 9.07

Cond. 1161  $\mu$ S

Temp. °C 9.3

Turbidity (ntu) 0.39

D.O. (mg/L) 1.37/12.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: main facility well - water clear - no  
odor - 5 sample bottles - LCF

COC # 143916

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SBWELLO2 Date: 3-14-12 Time: 1530

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 1

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.99

Cond. 745  $\mu$ S

Temp. °C 9.0

Turbidity (ntu) 0.16

D.O. (mg/L) 1.65/14.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stock tank well by reservoir - water  
clear - no odor - 5 sample bottles - LCF

COC # 143916

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TW01 Date: 3-14-12 Time: 1700

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P 74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.31

Cond. 2.72 mS

Temp. °C 8.4

Turbidity (ntu) 0.00

D.O. (mg/L) 1.34/11.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor - collected  
sample from outside faucet

COC# 143917



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-001  
**ClientSample ID:** 19XX18  
**COC:** 143918

**WorkOrder:** S1203252  
**CollectionDate:** 3/15/2012 9:50:00 AM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.82	s.u.			Field	03/15/2012 950
Conductivity	3030	µmhos/cm			Field	03/15/2012 950
Dissolved Oxygen	4.56	mg/L			Field	03/15/2012 950
Dissolved Oxygen (pct)	42.2	%			Field	03/15/2012 950
Turbidity	0.83	NTU			Field	03/15/2012 950
Temperature	11.2	°C			Field	03/15/2012 950
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	538	mg/L	5		SM 2320B	03/19/2012 2027 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	628	mg/L	5		SM 2320B	03/19/2012 2027 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	14	mg/L	5		SM 2320B	03/19/2012 2027 MZ
Chloride	7	mg/L	1		EPA 300.0	03/20/2012 201 AMB
Fluoride	0.6	mg/L	0.1		SM 4500FC	03/19/2012 2027 MZ
Nitrogen, Nitrate-Nitrite (as N)	0.2	mg/L	0.1		EPA 353.2	03/21/2012 1337 MEL
Sulfate	695	mg/L	1		EPA 300.0	03/20/2012 201 AMB
Calcium	8	mg/L	1		EPA 200.7	03/19/2012 1741 DG
Magnesium	2	mg/L	1		EPA 200.7	03/19/2012 1741 DG
Potassium	6	mg/L	1		EPA 200.7	03/19/2012 1741 DG
Sodium	578	mg/L	1		EPA 200.7	03/19/2012 1741 DG
Nitrogen, Ammonia (As N)	0.2	mg/L	0.1		EPA 350.1	03/20/2012 1616 MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/19/2012 2027 MZ
Electrical Conductivity	2580	µmhos/cm		5	SM 2510B	03/19/2012 2027 MZ
Total Dissolved Solids (180)	1690	mg/L		10	SM 2540	03/19/2012 1005 ARF
<b>Data Quality</b>						
Cation Sum	25.87	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Anion Sum	25.48	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Cation-Anion Balance (± 5%)	0.76	%		0.01	SM 1030E	03/27/2012 832 ALA
Solids, Total Dissolved (Calc)	1620	mg/L		10	SM 1030E	03/27/2012 832 ALA

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-001  
**ClientSample ID:** 19XX18  
**COC:** 143918

**WorkOrder:** S1203252  
**CollectionDate:** 3/15/2012 9:50:00 AM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1741	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1819	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1819	MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/19/2012 1741	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1819	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1741	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1819	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1741	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1819	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 1048	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1819	MS
Nickel	0.02	mg/L		0.01	EPA 200.7	03/19/2012 1741	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1819	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1819	MS
Uranium	0.0810	mg/L		0.0003	EPA 200.8	03/19/2012 1819	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1819	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1741	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/20/2012 1728	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/20/2012 1728	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	138	pCi/L		4	SM 7110B	04/16/2012 000	SH
Gross Alpha Precision (±)	8.8	pCi/L			SM 7110B	04/16/2012 000	SH
Gross Beta	49.3	pCi/L		7	SM 7110B	04/16/2012 000	SH
Gross Beta Precision (±)	5.0	pCi/L			SM 7110B	04/16/2012 000	SH
Radium 226	39.6	pCi/L		0.2	SM 7500-Ra B	04/03/2012 1202	SH
Radium 226 Precision (±)	0.8	pCi/L			SM 7500-Ra B	04/03/2012 1202	SH
Radium 228	ND	pCi/L		1	Ra-05	03/30/2012 1726	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	03/30/2012 1726	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-002  
**ClientSample ID:** 22X-19  
**COC:** 143918

**WorkOrder:** S1203252  
**CollectionDate:** 3/15/2012 10:30:00 AM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.97	s.u.			Field	03/15/2012 1030
Conductivity	1936	µmhos/cm			Field	03/15/2012 1030
Dissolved Oxygen	1.29	mg/L			Field	03/15/2012 1030
Dissolved Oxygen (pct)	12.1	%			Field	03/15/2012 1030
Turbidity	0.53	NTU			Field	03/15/2012 1030
Temperature	11.3	°C			Field	03/15/2012 1030
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	476	mg/L		5	SM 2320B	03/19/2012 2037 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	553	mg/L		5	SM 2320B	03/19/2012 2037 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	14	mg/L		5	SM 2320B	03/19/2012 2037 MZ
Chloride	14	mg/L		1	EPA 300.0	03/20/2012 1739 AMB
Fluoride	0.7	mg/L		0.1	SM 4500FC	03/19/2012 2037 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/21/2012 1339 MEL
Sulfate	610	mg/L		1	EPA 300.0	03/20/2012 1739 AMB
Calcium	6	mg/L		1	EPA 200.7	03/19/2012 1743 DG
Magnesium	2	mg/L		1	EPA 200.7	03/19/2012 1743 DG
Potassium	5	mg/L		1	EPA 200.7	03/19/2012 1743 DG
Sodium	554	mg/L		1	EPA 200.7	03/19/2012 1743 DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	03/20/2012 1617 MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/19/2012 2037 MZ
Electrical Conductivity	2240	µmhos/cm		5	SM 2510B	03/19/2012 2037 MZ
Total Dissolved Solids (180)	1440	mg/L		10	SM 2540	03/19/2012 1006 ARF
<b>Data Quality</b>						
Cation Sum	24.65	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Anion Sum	22.65	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Cation-Anion Balance (± 5%)	4.22	%		0.01	SM 1030E	03/27/2012 832 ALA
Solids, Total Dissolved (Calc)	1480	mg/L		10	SM 1030E	03/27/2012 832 ALA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-002  
**ClientSample ID:** 22X-19  
**COC:** 143918

**WorkOrder:** S1203252  
**CollectionDate:** 3/15/2012 10:30:00 AM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1743	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1828	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1828	MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/19/2012 1743	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1828	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1743	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1828	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1743	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1828	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 1050	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1828	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1743	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1828	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1828	MS
Uranium	0.0208	mg/L		0.0003	EPA 200.8	03/19/2012 1828	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1828	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1743	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/20/2012 1730	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/20/2012 1730	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	42.4	pCi/L		3	SM 7110B	04/16/2012 000	SH
Gross Alpha Precision (±)	5.1	pCi/L			SM 7110B	04/16/2012 000	SH
Gross Beta	14.5	pCi/L		7	SM 7110B	04/16/2012 000	SH
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	04/16/2012 000	SH
Radium 226	3.1	pCi/L		0.2	SM 7500-Ra B	04/03/2012 1202	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500-Ra B	04/03/2012 1202	SH
Radium 228	1.2	pCi/L		1	Ra-05	03/30/2012 1726	SH
Radium 228 Precision (±)	0.9	pCi/L			Ra-05	03/30/2012 1726	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-002  
**ClientSample ID:** ARH02  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 12:15:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.62	s.u.			Field	2/27/2012 12:15:00 PM
Conductivity	2780	µmhos/cm			Field	2/27/2012 12:15:00 PM
Dissolved Oxygen	2.35	mg/L			Field	2/27/2012 12:15:00 PM
Dissolved Oxygen (pct)	20.00	%			Field	2/27/2012 12:15:00 PM
Turbidity	0.88	NTU			Field	2/27/2012 12:15:00 PM
Temperature	6.8	°C			Field	2/27/2012 12:15:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	361	mg/L	5		SM 2320B	2/28/2012 4:35:54 PM MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	441	mg/L	5		SM 2320B	2/28/2012 4:35:54 PM MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L	5		SM 2320B	2/28/2012 4:35:54 PM MZ
Chloride	15	mg/L	1		EPA 300.0	2/29/2012 1:09:00 PM AMB
Fluoride	0.3	mg/L	0.1		SM 4500FC	2/28/2012 4:35:54 PM MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L	0.1		EPA 353.2	2/29/2012 11:02:00 AM MB
Sulfate	967	mg/L	1		EPA 300.0	3/2/2012 2:05:00 AM AMB
Calcium	193	mg/L	1		EPA 200.7	2/28/2012 3:36:48 PM DG
Magnesium	89	mg/L	1		EPA 200.7	2/28/2012 3:36:48 PM DG
Potassium	7	mg/L	1		EPA 200.7	2/28/2012 3:36:48 PM DG
Sodium	223	mg/L	1		EPA 200.7	2/28/2012 3:36:48 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L	0.1		EPA 350.1	3/7/2012 9:13:00 AM MB
<b>General Parameters</b>						
pH	7.8	s.u.	0.1		SM 4500 H B	2/28/2012 4:35:54 PM MZ
Electrical Conductivity	2310	µmhos/cm	5		SM 2510B	2/28/2012 4:35:54 PM MZ
Total Dissolved Solids (180)	1760	mg/L	10		SM 2540	3/6/2012 12:15:00 PM ARF
<b>Data Quality</b>						
Cation Sum	26.86	meq/L	0.01		SM 1030E	3/12/2012 11:26:54 AM ALA
Anion Sum	27.80	meq/L	0.01		SM 1030E	3/12/2012 11:26:54 AM ALA
Cation-Anion Balance (± 5%)	1.72	%	0.01		SM 1030E	3/12/2012 11:26:54 AM ALA
Solids, Total Dissolved (Calc)	1710	mg/L	10		SM 1030E	3/12/2012 11:26:54 AM ALA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-002  
**ClientSample ID:** ARH02  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 12:15:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/28/2012 3:36:48 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/28/2012 2:51:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/28/2012 2:51:00 PM	MS
Boron	0.2	mg/L		0.1	EPA 200.7	2/28/2012 3:36:48 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/28/2012 2:51:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:36:48 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/28/2012 2:51:00 PM	MS
Iron	0.41	mg/L		0.05	EPA 200.7	2/28/2012 3:36:48 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/28/2012 2:51:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/1/2012 8:59:06 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/28/2012 2:51:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:36:48 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/28/2012 2:51:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/28/2012 2:51:00 PM	MS
Uranium	0.0340	mg/L		0.0003	EPA 200.8	2/28/2012 2:51:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/28/2012 2:51:00 PM	MS
Zinc	0.06	mg/L		0.01	EPA 200.7	2/28/2012 3:36:48 PM	DG
<b>Metals - Total</b>							
Iron	0.39	mg/L		0.05	EPA 200.7	3/1/2012 4:43:15 PM	AB
Manganese	1.12	mg/L		0.02	EPA 200.7	3/1/2012 4:43:15 PM	AB
<b>Radionuclides - Dissolved</b>							
Gross Alpha	19.2	pCi/L		3	SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Alpha Precision (±)	3.7	pCi/L			SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Beta	10.9	pCi/L		8	SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	3/14/2012 8:36:27 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	3/8/2012 2:17:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	3/8/2012 2:17:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/7/2012 4:21:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/7/2012 4:21:00 PM	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 4 of 10



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-006  
**ClientSample ID:** CSWELL01  
**COC:** 143918

**WorkOrder:** S1203252  
**CollectionDate:** 3/16/2012 11:00:00 AM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.37	s.u.			Field	03/16/2012 1100
Conductivity	3300	µmhos/cm			Field	03/16/2012 1100
Dissolved Oxygen	1.98	mg/L			Field	03/16/2012 1100
Dissolved Oxygen (pct)	17.0	%			Field	03/16/2012 1100
Turbidity	0.00	NTU			Field	03/16/2012 1100
Temperature	6.7	°C			Field	03/16/2012 1100
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	665	mg/L		5	SM 2320B	03/19/2012 2128 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	811	mg/L		5	SM 2320B	03/19/2012 2128 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/19/2012 2128 MZ
Chloride	12	mg/L		1	EPA 300.0	03/20/2012 1838 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	03/19/2012 2128 MZ
Nitrogen, Nitrate-Nitrite (as N)	0.6	mg/L		0.1	EPA 353.2	03/21/2012 1344 MEL
Sulfate	781	mg/L		1	EPA 300.0	03/20/2012 1838 AMB
Calcium	39	mg/L		1	EPA 200.7	03/19/2012 1806 DG
Magnesium	29	mg/L		1	EPA 200.7	03/19/2012 1806 DG
Potassium	11	mg/L		1	EPA 200.7	03/19/2012 1806 DG
Sodium	536	mg/L		1	EPA 200.7	03/19/2012 1806 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	03/20/2012 1626 MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	03/19/2012 2128 MZ
Electrical Conductivity	2730	µmhos/cm		5	SM 2510B	03/19/2012 2128 MZ
Total Dissolved Solids (180)	1850	mg/L		10	SM 2540	03/19/2012 1010 ARF
<b>Data Quality</b>						
Cation Sum	27.92	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Anion Sum	29.92	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Cation-Anion Balance (± 5%)	3.45	%		0.01	SM 1030E	03/27/2012 832 ALA
Solids, Total Dissolved (Calc)	1810	mg/L		10	SM 1030E	03/27/2012 832 ALA

These results apply only to the samples tested.

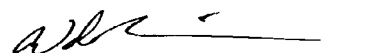
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-006  
**ClientSample ID:** CSWELL01  
**COC:** 143918

**WorkOrder:** S1203252  
**CollectionDate:** 3/16/2012 11:00:00 AM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1806	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1913	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1913	MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/19/2012 1806	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1913	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1806	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1913	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1806	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1913	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 1110	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1913	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1806	DG
Selenium	0.006	mg/L		0.005	EPA 200.8	03/19/2012 1913	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1913	MS
Uranium	0.0151	mg/L		0.0003	EPA 200.8	03/19/2012 1913	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1913	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1806	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/20/2012 1753	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	03/20/2012 1753	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	15.3	pCi/L		5	SM 7110B	04/16/2012 000	SH
Gross Alpha Precision (±)	4.1	pCi/L			SM 7110B	04/16/2012 000	SH
Gross Beta	12.2	pCi/L		8	SM 7110B	04/16/2012 000	SH
Gross Beta Precision (±)	4.9	pCi/L			SM 7110B	04/16/2012 000	SH
Radium 226	0.6	pCi/L		0.2	SM 7500-Ra B	04/03/2012 1202	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	04/03/2012 1202	SH
Radium 228	1.2	pCi/L		1	Ra-05	03/30/2012 1726	SH
Radium 228 Precision (±)	1.0	pCi/L			Ra-05	03/30/2012 1726	SH

These results apply only to the samples tested.

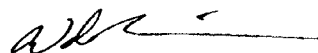
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-008  
**ClientSample ID:** CSWELL03  
**COC:** 131192

**WorkOrder:** S1203252  
**CollectionDate:** 3/16/2012 12:00:00 PM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.97	s.u.			Field	03/16/2012 1200
Conductivity	628	µmhos/cm			Field	03/16/2012 1200
Dissolved Oxygen	1.37	mg/L			Field	03/16/2012 1200
Dissolved Oxygen (pct)	12.7	%			Field	03/16/2012 1200
Turbidity	0.12	NTU			Field	03/16/2012 1200
Temperature	10.3	°C			Field	03/16/2012 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	329	mg/L		5	SM 2320B	03/19/2012 2201 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	401	mg/L		5	SM 2320B	03/19/2012 2201 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/19/2012 2201 MZ
Chloride	3	mg/L		1	EPA 300.0	03/20/2012 1907 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/19/2012 2201 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/21/2012 1352 MEL
Sulfate	29	mg/L		1	EPA 300.0	03/20/2012 1907 AMB
Calcium	35	mg/L		1	EPA 200.7	03/19/2012 1811 DG
Magnesium	17	mg/L		1	EPA 200.7	03/19/2012 1811 DG
Potassium	9	mg/L		1	EPA 200.7	03/19/2012 1811 DG
Sodium	94	mg/L		1	EPA 200.7	03/26/2012 1405 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2012 1628 MEL
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	03/19/2012 2201 MZ
Electrical Conductivity	667	µmhos/cm		5	SM 2510B	03/19/2012 2201 MZ
Total Dissolved Solids (180)	370	mg/L		10	SM 2540	03/19/2012 1012 ARF
<b>Data Quality</b>						
Cation Sum	7.40	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Anion Sum	7.29	meq/L		0.01	SM 1030E	03/27/2012 832 ALA
Cation-Anion Balance (± 5%)	0.75	%		0.01	SM 1030E	03/27/2012 832 ALA
Solids, Total Dissolved (Calc)	380	mg/L		10	SM 1030E	03/27/2012 832 ALA

These results apply only to the samples tested.

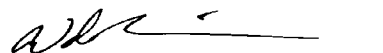
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/24/2012  
**Report ID:** S1203252001

**ProjectName:** Ross  
**Lab ID:** S1203252-008  
**ClientSample ID:** CSWELL03  
**COC:** 131192

**WorkOrder:** S1203252  
**CollectionDate:** 3/16/2012 12:00:00 PM  
**DateReceived:** 3/16/2012 3:22:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1811	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1923	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1923	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/19/2012 1811	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1923	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1811	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1923	MS
Iron	0.17	mg/L		0.05	EPA 200.7	03/19/2012 1811	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1923	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 1114	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1923	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1811	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1923	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1923	MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	03/19/2012 1923	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1923	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1811	DG
<b>Metals - Total</b>							
Iron	0.30	mg/L		0.05	EPA 200.7	03/20/2012 1758	DG
Manganese	0.11	mg/L		0.02	EPA 200.7	03/20/2012 1758	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/16/2012 000	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/16/2012 000	SH
Gross Beta	5.8	pCi/L		3	SM 7110B	04/16/2012 000	SH
Gross Beta Precision (±)	1.3	pCi/L			SM 7110B	04/16/2012 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	04/03/2012 1202	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	04/03/2012 1202	SH
Radium 228	ND	pCi/L		1	Ra-05	03/30/2012 1726	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	03/30/2012 1726	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-005  
**ClientSample ID:** DW WELL01  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 2:30:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.59	s.u.			Field	2/27/2012 2:30:00 PM
Conductivity	3080	µmhos/cm			Field	2/27/2012 2:30:00 PM
Dissolved Oxygen	2.83	mg/L			Field	2/27/2012 2:30:00 PM
Dissolved Oxygen (pct)	25.0	%			Field	2/27/2012 2:30:00 PM
Turbidity	4.32	NTU			Field	2/27/2012 2:30:00 PM
Temperature	9.0	°C			Field	2/27/2012 2:30:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	533	mg/L	5		SM 2320B	2/28/2012 5:16:45 PM MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	643	mg/L	5		SM 2320B	2/28/2012 5:16:45 PM MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L	5		SM 2320B	2/28/2012 5:16:45 PM MZ
Chloride	10	mg/L	1		EPA 300.0	3/2/2012 2:18:00 AM AMB
Fluoride	0.4	mg/L	0.1		SM 4500FC	2/28/2012 5:16:45 PM MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L	0.1		EPA 353.2	2/29/2012 11:06:00 AM MB
Sulfate	721	mg/L	1		EPA 300.0	2/28/2012 7:35:00 PM AMB
Calcium	18	mg/L	1		EPA 200.7	2/28/2012 3:43:48 PM DG
Magnesium	7	mg/L	1		EPA 200.7	2/28/2012 3:43:48 PM DG
Potassium	14	mg/L	1		EPA 200.7	2/28/2012 3:43:48 PM DG
Sodium	584	mg/L	1		EPA 200.7	2/28/2012 3:43:48 PM DG
Nitrogen, Ammonia (As N)	0.5	mg/L	0.1		EPA 350.1	3/7/2012 9:21:00 AM MB
<b>General Parameters</b>						
pH	8.3	s.u.	0.1		SM 4500 H B	2/28/2012 5:16:45 PM MZ
Electrical Conductivity	2590	µmhos/cm	5		SM 2510B	2/28/2012 5:16:45 PM MZ
Total Dissolved Solids (180)	1740	mg/L	10		SM 2540	2/28/2012 1:18:00 PM ARF
<b>Data Quality</b>						
Cation Sum	27.26	meq/L	0.01		SM 1030E	3/12/2012 11:26:54 AM ALA
Anion Sum	25.96	meq/L	0.01		SM 1030E	3/12/2012 11:26:54 AM ALA
Cation-Anion Balance (± 5%)	2.43	%	0.01		SM 1030E	3/12/2012 11:26:54 AM ALA
Solids, Total Dissolved (Calc)	1670	mg/L	10		SM 1030E	3/12/2012 11:26:54 AM ALA

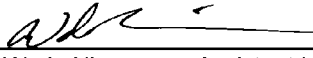
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-005  
**ClientSample ID:** DW WELL01  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 2:30:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/28/2012 3:43:48 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/28/2012 3:06:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/28/2012 3:06:00 PM	MS
Boron	0.4	mg/L		0.1	EPA 200.7	2/28/2012 3:43:48 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/28/2012 3:06:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:43:48 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/28/2012 3:06:00 PM	MS
Iron	0.30	mg/L		0.05	EPA 200.7	2/28/2012 3:43:48 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/28/2012 3:06:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/1/2012 9:04:41 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/28/2012 3:06:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:43:48 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/28/2012 3:06:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/28/2012 3:06:00 PM	MS
Uranium	0.0026	mg/L		0.0003	EPA 200.8	2/28/2012 3:06:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/28/2012 3:06:00 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:43:48 PM	DG
<b>Metals - Total</b>							
Iron	1.64	mg/L		0.05	EPA 200.7	3/1/2012 5:02:41 PM	AB
Manganese	0.03	mg/L		0.02	EPA 200.7	3/1/2012 5:02:41 PM	AB
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		6	SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Beta	ND	pCi/L		8	SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	3/14/2012 8:36:27 PM	SH
Radium 226	0.7	pCi/L		0.2	SM 7500-Ra B	3/8/2012 2:17:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	3/8/2012 2:17:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/7/2012 4:21:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/7/2012 4:21:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-003  
**ClientSample ID:** HB WELL04  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 1:00:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.64	s.u.			Field	2/27/2012 1:00:00 PM
Conductivity	1672	µmhos/cm			Field	2/27/2012 1:00:00 PM
Dissolved Oxygen	2.65	mg/L			Field	2/27/2012 1:00:00 PM
Dissolved Oxygen (pct)	22.5	%			Field	2/27/2012 1:00:00 PM
Turbidity	0.00	NTU			Field	2/27/2012 1:00:00 PM
Temperature	7.3	°C			Field	2/27/2012 1:00:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	361	mg/L		5	SM 2320B	2/28/2012 4:46:24 PM MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	441	mg/L		5	SM 2320B	2/28/2012 4:46:24 PM MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	2/28/2012 4:46:24 PM MZ
Chloride	19	mg/L		1	EPA 300.0	2/29/2012 1:22:00 PM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	2/28/2012 4:46:24 PM MZ
Nitrogen, Nitrate-Nitrite (as N)	1.1	mg/L		0.1	EPA 353.2	2/29/2012 11:03:00 AM MB
Sulfate	657	mg/L		1	EPA 300.0	2/28/2012 6:17:00 PM AMB
Calcium	204	mg/L		1	EPA 200.7	2/28/2012 3:39:08 PM DG
Magnesium	63	mg/L		1	EPA 200.7	2/28/2012 3:39:08 PM DG
Potassium	8	mg/L		1	EPA 200.7	2/28/2012 3:39:08 PM DG
Sodium	133	mg/L		1	EPA 200.7	2/28/2012 3:39:08 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	3/7/2012 9:14:00 AM MB
<b>General Parameters</b>						
pH	7.8	s.u.		0.1	SM 4500 H B	2/28/2012 4:46:24 PM MZ
Electrical Conductivity	1860	µmhos/cm		5	SM 2510B	2/28/2012 4:46:24 PM MZ
Total Dissolved Solids (180)	1440	mg/L		10	SM 2540	2/28/2012 1:16:00 PM ARF
<b>Data Quality</b>						
Cation Sum	21.38	meq/L		0.01	SM 1030E	3/12/2012 11:26:54 AM ALA
Anion Sum	21.51	meq/L		0.01	SM 1030E	3/12/2012 11:26:54 AM ALA
Cation-Anion Balance (± 5%)	0.28	%		0.01	SM 1030E	3/12/2012 11:26:54 AM ALA
Solids, Total Dissolved (Calc)	1310	mg/L		10	SM 1030E	3/12/2012 11:26:54 AM ALA

These results apply only to the samples tested.

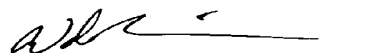
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-003  
**ClientSample ID:** HB WELL04  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 1:00:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	2/28/2012 3:39:08 PM	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/28/2012 2:56:00 PM	MS
Barium	ND	mg/L		0.5	EPA 200.8	2/28/2012 2:56:00 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	2/28/2012 3:39:08 PM	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/28/2012 2:56:00 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:39:08 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	2/28/2012 2:56:00 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	2/28/2012 3:39:08 PM	DG
Lead	ND	mg/L		0.02	EPA 200.8	2/28/2012 2:56:00 PM	MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/1/2012 9:00:57 AM	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/28/2012 2:56:00 PM	MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:39:08 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/28/2012 2:56:00 PM	MS
Silver	ND	mg/L		0.003	EPA 200.8	2/28/2012 2:56:00 PM	MS
Uranium	0.0318	mg/L		0.0003	EPA 200.8	2/28/2012 2:56:00 PM	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/28/2012 2:56:00 PM	MS
Zinc	0.04	mg/L		0.01	EPA 200.7	2/28/2012 3:39:08 PM	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	3/1/2012 4:57:49 PM	AB
Manganese	0.06	mg/L		0.02	EPA 200.7	3/1/2012 4:57:49 PM	AB
<b>Radionuclides - Dissolved</b>							
Gross Alpha	18.9	pCi/L		3	SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Alpha Precision (±)	3.3	pCi/L			SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Beta	10.8	pCi/L		5	SM 7110B	3/14/2012 8:36:27 PM	SH
Gross Beta Precision (±)	3.0	pCi/L			SM 7110B	3/14/2012 8:36:27 PM	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	3/8/2012 2:17:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	3/8/2012 2:17:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	3/7/2012 4:21:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/7/2012 4:21:00 PM	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-004  
**ClientSample ID:** HB WELL05  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 1:45:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.79	s.u.			Field	2/27/2012 1:45:00 PM
Conductivity	1673	µmhos/cm			Field	2/27/2012 1:45:00 PM
Dissolved Oxygen	2.76	mg/L			Field	2/27/2012 1:45:00 PM
Dissolved Oxygen (pct)	24.0	%			Field	2/27/2012 1:45:00 PM
Turbidity	28.1	NTU			Field	2/27/2012 1:45:00 PM
Temperature	8.3	°C			Field	2/27/2012 1:45:00 PM
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	539	mg/L		5	SM 2320B	2/28/2012 5:06:28 PM MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	658	mg/L		5	SM 2320B	2/28/2012 5:06:28 PM MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	2/28/2012 5:06:28 PM MZ
Chloride	6	mg/L		1	EPA 300.0	2/29/2012 1:35:00 PM AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	2/28/2012 5:06:28 PM MZ
Nitrogen, Nitrate-Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	2/29/2012 11:04:00 AM MB
Sulfate	441	mg/L		1	EPA 300.0	2/28/2012 6:30:00 PM AMB
Calcium	103	mg/L		1	EPA 200.7	2/28/2012 3:41:28 PM DG
Magnesium	39	mg/L		1	EPA 200.7	2/28/2012 3:41:28 PM DG
Potassium	9	mg/L		1	EPA 200.7	2/28/2012 3:41:28 PM DG
Sodium	279	mg/L		1	EPA 200.7	2/28/2012 3:41:28 PM DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	3/7/2012 9:15:00 AM MB
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	2/28/2012 5:06:28 PM MZ
Electrical Conductivity	1860	µmhos/cm		5	SM 2510B	2/28/2012 5:06:28 PM MZ
Total Dissolved Solids (180)	1220	mg/L		10	SM 2540	2/28/2012 1:17:00 PM ARF
<b>Data Quality</b>						
Cation Sum	20.70	meq/L		0.01	SM 1030E	3/12/2012 11:26:54 AM ALA
Anion Sum	20.18	meq/L		0.01	SM 1030E	3/12/2012 11:26:54 AM ALA
Cation-Anion Balance (± 5%)	1.26	%		0.01	SM 1030E	3/12/2012 11:26:54 AM ALA
Solids, Total Dissolved (Calc)	1200	mg/L		10	SM 1030E	3/12/2012 11:26:54 AM ALA

## These results apply only to the samples tested.

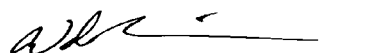
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 3/20/2012  
**Report ID:** S1202365001

**ProjectName:** Ross  
**Lab ID:** S1202365-004  
**ClientSample ID:** HB WELL05  
**COC:** 143915

**WorkOrder:** S1202365  
**CollectionDate:** 2/27/2012 1:45:00 PM  
**DateReceived:** 2/28/2012 8:07:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	2/28/2012 3:41:28 PM DG
Arsenic	ND	mg/L		0.005	EPA 200.8	2/28/2012 3:01:00 PM MS
Barium	ND	mg/L		0.5	EPA 200.8	2/28/2012 3:01:00 PM MS
Boron	0.2	mg/L		0.1	EPA 200.7	2/28/2012 3:41:28 PM DG
Cadmium	ND	mg/L		0.002	EPA 200.8	2/28/2012 3:01:00 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:41:28 PM DG
Copper	ND	mg/L		0.01	EPA 200.8	2/28/2012 3:01:00 PM MS
Iron	0.11	mg/L		0.05	EPA 200.7	2/28/2012 3:41:28 PM DG
Lead	ND	mg/L		0.02	EPA 200.8	2/28/2012 3:01:00 PM MS
Mercury	ND	mg/L		0.001	EPA 245.1	3/1/2012 9:02:48 AM BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	2/28/2012 3:01:00 PM MS
Nickel	ND	mg/L		0.01	EPA 200.7	2/28/2012 3:41:28 PM DG
Selenium	ND	mg/L		0.005	EPA 200.8	2/28/2012 3:01:00 PM MS
Silver	ND	mg/L		0.003	EPA 200.8	2/28/2012 3:01:00 PM MS
Uranium	0.0138	mg/L		0.0003	EPA 200.8	2/28/2012 3:01:00 PM MS
Vanadium	ND	mg/L		0.02	EPA 200.8	2/28/2012 3:01:00 PM MS
Zinc	0.01	mg/L		0.01	EPA 200.7	2/28/2012 3:41:28 PM DG
<b>Metals - Total</b>						
Iron	2.69	mg/L		0.05	EPA 200.7	3/1/2012 5:00:16 PM AB
Manganese	0.05	mg/L		0.02	EPA 200.7	3/1/2012 5:00:16 PM AB
<b>Radionuclides - Dissolved</b>						
Gross Alpha	9.0	pCi/L		4	SM 7110B	3/14/2012 8:36:27 PM SH
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	3/14/2012 8:36:27 PM SH
Gross Beta	6.4	pCi/L		5	SM 7110B	3/14/2012 8:36:27 PM SH
Gross Beta Precision (±)	2.9	pCi/L			SM 7110B	3/14/2012 8:36:27 PM SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	3/8/2012 2:17:00 PM SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	3/8/2012 2:17:00 PM SH
Radium 228	ND	pCi/L		1	Ra-05	3/7/2012 4:21:00 PM SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	3/7/2012 4:21:00 PM SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-006  
**ClientSample ID:** P17177W  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 3:00:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.14	s.u.			Field	03/14/2012 1500
Conductivity	767	µmhos/cm			Field	03/14/2012 1500
Dissolved Oxygen	1.44	mg/L			Field	03/14/2012 1500
Dissolved Oxygen (pct)	12.9	%			Field	03/14/2012 1500
Turbidity	0.00	NTU			Field	03/14/2012 1500
Temperature	9.6	°C			Field	03/14/2012 1500
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	352	mg/L		5	SM 2320B	03/19/2012 1447 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	430	mg/L		5	SM 2320B	03/19/2012 1447 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/19/2012 1447 MZ
Chloride	9	mg/L		1	EPA 300.0	03/19/2012 1619 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/19/2012 1447 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/22/2012 1513 MB
Sulfate	59	mg/L		1	EPA 300.0	03/19/2012 1619 AMB
Calcium	44	mg/L		1	EPA 200.7	03/19/2012 1537 DG
Magnesium	12	mg/L		1	EPA 200.7	03/19/2012 1537 DG
Potassium	5	mg/L		1	EPA 200.7	03/19/2012 1537 DG
Sodium	121	mg/L		1	EPA 200.7	03/19/2012 1537 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2012 1542 MEL
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	03/19/2012 1447 MZ
Electrical Conductivity	796	µmhos/cm		5	SM 2510B	03/19/2012 1447 MZ
Total Dissolved Solids (180)	440	mg/L		10	SM 2540	03/30/2012 053 ARF
<b>Data Quality</b>						
Cation Sum	8.58	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Anion Sum	8.53	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Cation-Anion Balance (± 5%)	0.28	%		0.01	SM 1030E	04/03/2012 1207 ALA
Solids, Total Dissolved (Calc)	460	mg/L		10	SM 1030E	04/03/2012 1207 ALA

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-006  
**ClientSample ID:** P17177W  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 3:00:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1537	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1427	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1427	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/19/2012 1537	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1427	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1537	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1427	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1537	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1427	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 922	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1427	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1537	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1427	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1427	MS
Uranium	0.0181	mg/L		0.0003	EPA 200.8	03/19/2012 1427	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1427	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1537	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/20/2012 1547	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/20/2012 1547	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	7.0	pCi/L		2	SM 7110B	03/27/2012 2205	SH
Gross Alpha Precision (±)	1.6	pCi/L			SM 7110B	03/27/2012 2205	SH
Gross Beta	6.6	pCi/L		3	SM 7110B	03/27/2012 2205	SH
Gross Beta Precision (±)	1.3	pCi/L			SM 7110B	03/27/2012 2205	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	03/22/2012 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	03/22/2012 000	SH
Radium 228	ND	pCi/L		1	Ra-05	03/23/2012 1659	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	03/23/2012 1659	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/30/2012  
**Report ID:** S1203441001

**ProjectName:** Ross  
**Lab ID:** S1203441-001  
**ClientSample ID:** P42868W  
**COC:** 143919

**WorkOrder:** S1203441  
**CollectionDate:** 3/28/2012 1:15:00 PM  
**DateReceived:** 3/29/2012 8:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.03	s.u.			Field	03/28/2012 1315
Conductivity	907	µmhos/cm			Field	03/28/2012 1315
Dissolved Oxygen	1.73	mg/L			Field	03/28/2012 1315
Dissolved Oxygen (pct)	15.4	%			Field	03/28/2012 1315
Turbidity	3.68	NTU			Field	03/28/2012 1315
Temperature	8.5	°C			Field	03/28/2012 1315
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	414	mg/L		5	SM 2320B	03/29/2012 1943 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	465	mg/L		5	SM 2320B	03/29/2012 1943 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	20	mg/L		5	SM 2320B	03/29/2012 1943 MZ
Chloride	ND	mg/L		1	EPA 300.0	03/29/2012 1451 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/29/2012 1943 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/29/2012 1138 MB
Sulfate	84	mg/L		1	EPA 300.0	03/29/2012 1451 AMB
Calcium	2	mg/L		1	EPA 200.7	03/30/2012 1444 MS
Magnesium	ND	mg/L		1	EPA 200.7	03/30/2012 1444 MS
Potassium	3	mg/L		1	EPA 200.7	03/30/2012 1444 MS
Sodium	230	mg/L		1	EPA 200.7	03/30/2012 1444 MS
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2012 1539 MEL
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	03/29/2012 1943 MZ
Electrical Conductivity	940	µmhos/cm		5	SM 2510B	03/29/2012 1943 MZ
Total Dissolved Solids (180)	580	mg/L		10	SM 2540	03/30/2012 1400 ARF
<b>Data Quality</b>						
Cation Sum	10.18	meq/L		0.01	SM 1030E	04/09/2012 1522 ALA
Anion Sum	10.02	meq/L		0.01	SM 1030E	04/09/2012 1522 ALA
Cation-Anion Balance (± 5%)	0.75	%		0.01	SM 1030E	04/09/2012 1522 ALA
Solids, Total Dissolved (Calc)	570	mg/L		10	SM 1030E	04/09/2012 1522 ALA

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/30/2012  
**Report ID:** S1203441001

**ProjectName:** Ross  
**Lab ID:** S1203441-001  
**ClientSample ID:** P42868W  
**COC:** 143919

**WorkOrder:** S1203441  
**CollectionDate:** 3/28/2012 1:15:00 PM  
**DateReceived:** 3/29/2012 8:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/30/2012 1444 MS
Arsenic	0.012	mg/L		0.005	EPA 200.8	03/29/2012 1212 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/29/2012 1212 MS
Boron	0.2	mg/L		0.1	EPA 200.7	03/30/2012 1444 MS
Cadmium	ND	mg/L		0.002	EPA 200.8	03/29/2012 1212 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/30/2012 1444 MS
Copper	0.01	mg/L		0.01	EPA 200.8	03/29/2012 1212 MS
Iron	ND	mg/L		0.05	EPA 200.7	03/30/2012 1444 MS
Lead	ND	mg/L		0.02	EPA 200.8	03/29/2012 1212 MS
Mercury	ND	mg/L		0.001	EPA 245.1	04/03/2012 1047 BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/29/2012 1212 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/30/2012 1444 MS
Selenium	ND	mg/L		0.005	EPA 200.8	03/29/2012 1212 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/29/2012 1212 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	03/29/2012 1212 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/29/2012 1212 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/30/2012 1444 MS
<b>Metals - Total</b>						
Iron	0.83	mg/L		0.05	EPA 200.7	03/30/2012 1512 MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/30/2012 1512 MS
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	04/23/2012 2036 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/23/2012 2036 SH
Gross Beta	5.6	pCi/L		3	SM 7110B	04/23/2012 2036 SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	04/23/2012 2036 SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	04/12/2012 1136 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	04/12/2012 1136 SH
Radium 228	1.2	pCi/L		1	Ra-05	04/12/2012 1714 SH
Radium 228 Precision (±)	1.1	pCi/L			Ra-05	04/12/2012 1714 SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-002  
**ClientSample ID:** P50113W  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 1:00:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.75	s.u.			Field	03/14/2012 1300
Conductivity	1498	µmhos/cm			Field	03/14/2012 1300
Dissolved Oxygen	1.88	mg/L			Field	03/14/2012 1300
Dissolved Oxygen (pct)	16.4	%			Field	03/14/2012 1300
Turbidity	0.16	NTU			Field	03/14/2012 1300
Temperature	8.2	°C			Field	03/14/2012 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	536	mg/L	5		SM 2320B	03/29/2012 524 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	654	mg/L	5		SM 2320B	03/29/2012 524 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L	5		SM 2320B	03/29/2012 524 MZ
Chloride	42	mg/L	1		EPA 300.0	03/29/2012 1349 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/19/2012 1045 MZ
Nitrogen, Nitrate-Nitrite (as N)	17.0	mg/L		0.1	EPA 353.2	03/22/2012 1511 MB
Sulfate	189	mg/L	1		EPA 300.0	03/19/2012 1437 AMB
Calcium	100	mg/L	1		EPA 200.7	03/30/2012 948 MS
Magnesium	52	mg/L	1		EPA 200.7	03/30/2012 948 MS
Potassium	7	mg/L	1		EPA 200.7	03/30/2012 948 MS
Sodium	178	mg/L	1		EPA 200.7	03/19/2012 1514 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2012 1538 MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	03/19/2012 1045 MZ
Electrical Conductivity	1510	µmhos/cm		5	SM 2510B	03/19/2012 1045 MZ
Total Dissolved Solids (180)	910	mg/L		10	SM 2540	03/16/2012 926 ARF
<b>Data Quality</b>						
Cation Sum	17.18	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Anion Sum	17.07	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Cation-Anion Balance (± 5%)	0.32	%		0.01	SM 1030E	04/03/2012 1207 ALA
Solids, Total Dissolved (Calc)	970	mg/L		10	SM 1030E	04/03/2012 1207 ALA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-002  
**ClientSample ID:** P50113W  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 1:00:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1514	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1407	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1407	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/19/2012 1514	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1407	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1514	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1407	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1514	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1407	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 909	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1407	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1514	DG
Selenium	0.017	mg/L		0.005	EPA 200.8	03/19/2012 1407	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1407	MS
Uranium	0.159	mg/L		0.0003	EPA 200.8	03/19/2012 1407	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1407	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1514	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/20/2012 1530	DG
Manganese	0.46	mg/L		0.02	EPA 200.7	03/20/2012 1530	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	68.9	pCi/L		2	SM 7110B	03/27/2012 2205	SH
Gross Alpha Precision (±)	5.0	pCi/L			SM 7110B	03/27/2012 2205	SH
Gross Beta	34.9	pCi/L		4	SM 7110B	03/27/2012 2205	SH
Gross Beta Precision (±)	2.9	pCi/L			SM 7110B	03/27/2012 2205	SH
Radium 226	0.4	pCi/L		0.2	SM 7500-Ra B	03/22/2012 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	03/22/2012 000	SH
Radium 228	ND	pCi/L		1	Ra-05	03/23/2012 1659	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	03/23/2012 1659	SH

These results apply only to the samples tested.

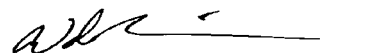
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/30/2012  
**Report ID:** S1203441001

**ProjectName:** Ross  
**Lab ID:** S1203441-003  
**ClientSample ID:** P61006W  
**COC:** 143919

**WorkOrder:** S1203441  
**CollectionDate:** 3/28/2012 2:30:00 PM  
**DateReceived:** 3/29/2012 8:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.21	s.u.			Field	03/28/2012 1430
Conductivity	994	µmhos/cm			Field	03/28/2012 1430
Dissolved Oxygen	1.42	mg/L			Field	03/28/2012 1430
Dissolved Oxygen (pct)	13.3	%			Field	03/28/2012 1430
Turbidity	4.00	NTU			Field	03/28/2012 1430
Temperature	10.4	°C			Field	03/28/2012 1430
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	527	mg/L		5	SM 2320B	03/29/2012 2004 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	643	mg/L		5	SM 2320B	03/29/2012 2004 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/29/2012 2004 MZ
Chloride	ND	mg/L		1	EPA 300.0	03/29/2012 1512 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/29/2012 2004 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/29/2012 1140 MB
Sulfate	78	mg/L		1	EPA 300.0	03/29/2012 1512 AMB
Calcium	20	mg/L		1	EPA 200.7	03/30/2012 1501 MS
Magnesium	10	mg/L		1	EPA 200.7	03/30/2012 1501 MS
Potassium	9	mg/L		1	EPA 200.7	03/30/2012 1501 MS
Sodium	211	mg/L		1	EPA 200.7	03/30/2012 1501 MS
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	04/02/2012 1541 MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	03/29/2012 2004 MZ
Electrical Conductivity	1100	µmhos/cm		5	SM 2510B	03/29/2012 2004 MZ
Total Dissolved Solids (180)	640	mg/L		10	SM 2540	03/30/2012 1402 ARF
<b>Data Quality</b>						
Cation Sum	11.20	meq/L		0.01	SM 1030E	04/09/2012 1522 ALA
Anion Sum	12.16	meq/L		0.01	SM 1030E	04/09/2012 1522 ALA
Cation-Anion Balance (± 5%)	4.07	%		0.01	SM 1030E	04/09/2012 1522 ALA
Solids, Total Dissolved (Calc)	650	mg/L		10	SM 1030E	04/09/2012 1522 ALA

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/30/2012  
**Report ID:** S1203441001

**ProjectName:** Ross  
**Lab ID:** S1203441-003  
**ClientSample ID:** P61006W  
**COC:** 143919

**WorkOrder:** S1203441  
**CollectionDate:** 3/28/2012 2:30:00 PM  
**DateReceived:** 3/29/2012 8:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/30/2012 1501	MS
Arsenic	ND	mg/L		0.005	EPA 200.8	03/29/2012 1246	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/29/2012 1246	MS
Boron	0.1	mg/L		0.1	EPA 200.7	03/30/2012 1501	MS
Cadmium	ND	mg/L		0.002	EPA 200.8	03/29/2012 1246	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/30/2012 1501	MS
Copper	ND	mg/L		0.01	EPA 200.8	03/29/2012 1246	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/30/2012 1501	MS
Lead	ND	mg/L		0.02	EPA 200.8	03/29/2012 1246	MS
Mercury	ND	mg/L		0.001	EPA 245.1	04/03/2012 1051	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/29/2012 1246	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/30/2012 1501	MS
Selenium	ND	mg/L		0.005	EPA 200.8	03/29/2012 1246	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/29/2012 1246	MS
Uranium	0.0022	mg/L		0.0003	EPA 200.8	03/29/2012 1246	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/29/2012 1246	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/30/2012 1501	MS
<b>Metals - Total</b>							
Iron	0.38	mg/L		0.05	EPA 200.7	03/30/2012 1531	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/30/2012 1531	MS
<b>Radionuclides - Dissolved</b>							
Gross Alpha	6.3	pCi/L		2	SM 7110B	04/23/2012 2036	SH
Gross Alpha Precision (±)	1.6	pCi/L			SM 7110B	04/23/2012 2036	SH
Gross Beta	6.8	pCi/L		4	SM 7110B	04/23/2012 2036	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	04/23/2012 2036	SH
Radium 226	0.7	pCi/L		0.2	SM 7500-Ra B	04/12/2012 1136	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	04/12/2012 1136	SH
Radium 228	1.7	pCi/L		1	Ra-05	04/12/2012 1714	SH
Radium 228 Precision (±)	1.2	pCi/L			Ra-05	04/12/2012 1714	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/30/2012  
**Report ID:** S1203441001

**ProjectName:** Ross  
**Lab ID:** S1203441-002  
**ClientSample ID:** P61007W  
**COC:** 143919

**WorkOrder:** S1203441  
**CollectionDate:** 3/28/2012 1:50:00 PM  
**DateReceived:** 3/29/2012 8:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.72	s.u.			Field	03/28/2012 1350
Conductivity	1088	µmhos/cm			Field	03/28/2012 1350
Dissolved Oxygen	1.31	mg/L			Field	03/28/2012 1350
Dissolved Oxygen (pct)	12.2	%			Field	03/28/2012 1350
Turbidity	9.78	NTU			Field	03/28/2012 1350
Temperature	10.1	°C			Field	03/28/2012 1350
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	548	mg/L		5	SM 2320B	03/29/2012 1954 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	630	mg/L		5	SM 2320B	03/29/2012 1954 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	19	mg/L		5	SM 2320B	03/29/2012 1954 MZ
Chloride	2	mg/L		1	EPA 300.0	03/29/2012 1502 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/29/2012 1954 MZ
Nitrogen, Nitrate-Nitrite (as N)	0.4	mg/L		0.1	EPA 353.2	03/29/2012 1139 MB
Sulfate	86	mg/L		1	EPA 300.0	03/29/2012 1502 AMB
Calcium	4	mg/L		1	EPA 200.7	03/30/2012 1458 MS
Magnesium	2	mg/L		1	EPA 200.7	03/30/2012 1458 MS
Potassium	4	mg/L		1	EPA 200.7	03/30/2012 1458 MS
Sodium	283	mg/L		1	EPA 200.7	03/30/2012 1458 MS
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	04/02/2012 1540 MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/29/2012 1954 MZ
Electrical Conductivity	1180	µmhos/cm		5	SM 2510B	03/29/2012 1954 MZ
Total Dissolved Solids (180)	730	mg/L		10	SM 2540	03/30/2012 1401 ARF
<b>Data Quality</b>						
Cation Sum	12.79	meq/L		0.01	SM 1030E	04/09/2012 1522 ALA
Anion Sum	12.83	meq/L		0.01	SM 1030E	04/09/2012 1522 ALA
Cation-Anion Balance (± 5%)	0.15	%		0.01	SM 1030E	04/09/2012 1522 ALA
Solids, Total Dissolved (Calc)	710	mg/L		10	SM 1030E	04/09/2012 1522 ALA

These results apply only to the samples tested.

## 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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/30/2012  
**Report ID:** S1203441001

**ProjectName:** Ross  
**Lab ID:** S1203441-002  
**ClientSample ID:** P61007W  
**COC:** 143919

**WorkOrder:** S1203441  
**CollectionDate:** 3/28/2012 1:50:00 PM  
**DateReceived:** 3/29/2012 8:17:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/30/2012 1458	MS
Arsenic	0.006	mg/L		0.005	EPA 200.8	03/29/2012 1241	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/29/2012 1241	MS
Boron	0.2	mg/L		0.1	EPA 200.7	03/30/2012 1458	MS
Cadmium	ND	mg/L		0.002	EPA 200.8	03/29/2012 1241	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/30/2012 1458	MS
Copper	ND	mg/L		0.01	EPA 200.8	03/29/2012 1241	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/30/2012 1458	MS
Lead	ND	mg/L		0.02	EPA 200.8	03/29/2012 1241	MS
Mercury	ND	mg/L		0.001	EPA 245.1	04/03/2012 1049	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/29/2012 1241	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/30/2012 1458	MS
Selenium	0.005	mg/L		0.005	EPA 200.8	03/29/2012 1241	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/29/2012 1241	MS
Uranium	0.0102	mg/L		0.0003	EPA 200.8	03/29/2012 1241	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/29/2012 1241	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/30/2012 1458	MS
<b>Metals - Total</b>							
Iron	0.37	mg/L		0.05	EPA 200.7	03/30/2012 1517	MS
Manganese	ND	mg/L		0.02	EPA 200.7	03/30/2012 1517	MS
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.3	pCi/L		2	SM 7110B	04/23/2012 2036	SH
Gross Alpha Precision (±)	1.8	pCi/L			SM 7110B	04/23/2012 2036	SH
Gross Beta	6.9	pCi/L		4	SM 7110B	04/23/2012 2036	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	04/23/2012 2036	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	04/12/2012 1136	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	04/12/2012 1136	SH
Radium 228	ND	pCi/L		1	Ra-05	04/12/2012 1714	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	04/12/2012 1714	SH

These results apply only to the samples tested.

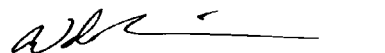
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

Page 4 of 8



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-005  
**ClientSample ID:** P71108W-RAW  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 2:30:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.70	s.u.			Field	03/14/2012 1430
Conductivity	1796	µmhos/cm			Field	03/14/2012 1430
Dissolved Oxygen	1.30	mg/L			Field	03/14/2012 1430
Dissolved Oxygen (pct)	10.9	%			Field	03/14/2012 1430
Turbidity	1.84	NTU			Field	03/14/2012 1430
Temperature	6.6	°C			Field	03/14/2012 1430
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	619	mg/L		5	SM 2320B	03/19/2012 1437 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	755	mg/L		5	SM 2320B	03/19/2012 1437 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/19/2012 1437 MZ
Chloride	7	mg/L		1	EPA 300.0	03/19/2012 1511 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	03/19/2012 1437 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/19/2012 1652 MB
Sulfate	431	mg/L		1	EPA 300.0	03/19/2012 1511 AMB
Calcium	61	mg/L		1	EPA 200.7	03/19/2012 1535 DG
Magnesium	59	mg/L		1	EPA 200.7	03/19/2012 1535 DG
Potassium	10	mg/L		1	EPA 200.7	03/19/2012 1535 DG
Sodium	341	mg/L		1	EPA 200.7	03/19/2012 1535 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2012 1541 MEL
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	03/19/2012 1437 MZ
Electrical Conductivity	1930	µmhos/cm		5	SM 2510B	03/19/2012 1437 MZ
Total Dissolved Solids (180)	1220	mg/L		10	SM 2540	03/16/2012 929 ARF
<b>Data Quality</b>						
Cation Sum	22.95	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Anion Sum	21.55	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Cation-Anion Balance (± 5%)	3.14	%		0.01	SM 1030E	04/03/2012 1207 ALA
Solids, Total Dissolved (Calc)	1280	mg/L		10	SM 1030E	04/03/2012 1207 ALA

These results apply only to the samples tested.

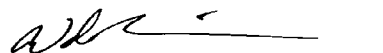
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-005  
**ClientSample ID:** P71108W-RAW  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 2:30:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1535	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1422	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1422	MS
Boron	0.1	mg/L		0.1	EPA 200.7	03/19/2012 1535	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1422	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1535	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1422	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1535	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1422	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 921	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1422	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1535	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1422	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1422	MS
Uranium	0.0853	mg/L		0.0003	EPA 200.8	03/19/2012 1422	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1422	MS
Zinc	0.03	mg/L		0.01	EPA 200.7	03/19/2012 1535	DG
<b>Metals - Total</b>							
Iron	0.26	mg/L		0.05	EPA 200.7	03/20/2012 1544	DG
Manganese	0.39	mg/L		0.02	EPA 200.7	03/20/2012 1544	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	61.6	pCi/L		4	SM 7110B	03/27/2012 2205	SH
Gross Alpha Precision (±)	5.4	pCi/L			SM 7110B	03/27/2012 2205	SH
Gross Beta	23.8	pCi/L		4	SM 7110B	03/27/2012 2205	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	03/27/2012 2205	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	03/22/2012 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	03/22/2012 000	SH
Radium 228	1.3	pCi/L		1	Ra-05	03/23/2012 1659	SH
Radium 228 Precision (±)	1.3	pCi/L			Ra-05	03/23/2012 1659	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-001  
**ClientSample ID:** P84665W  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 12:30:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.66	s.u.			Field	03/14/2012 1230
Conductivity	1090	µmhos/cm			Field	03/14/2012 1230
Dissolved Oxygen	2.63	mg/L			Field	03/14/2012 1230
Dissolved Oxygen (pct)	23.1	%			Field	03/14/2012 1230
Turbidity	0.86	NTU			Field	03/14/2012 1230
Temperature	8.0	°C			Field	03/14/2012 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	523	mg/L		5	SM 2320B	03/29/2012 516 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	638	mg/L		5	SM 2320B	03/29/2012 516 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/29/2012 516 MZ
Chloride	17	mg/L		1	EPA 300.0	03/29/2012 1336 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	03/19/2012 1036 MZ
Nitrogen, Nitrate-Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	03/19/2012 1647 MB
Sulfate	108	mg/L		1	EPA 300.0	03/27/2012 1637 AMB
Calcium	109	mg/L		1	EPA 200.7	03/26/2012 1358 DG
Magnesium	48	mg/L		1	EPA 200.7	03/30/2012 946 MS
Potassium	6	mg/L		1	EPA 200.7	03/30/2012 946 MS
Sodium	83	mg/L		1	EPA 200.7	03/30/2012 946 MS
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/16/2012 1208 MB
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	03/19/2012 1036 MZ
Electrical Conductivity	1020	µmhos/cm		5	SM 2510B	03/19/2012 1036 MZ
Total Dissolved Solids (180)	700	mg/L		10	SM 2540	03/30/2012 051 ARF
<b>Data Quality</b>						
Cation Sum	13.10	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Anion Sum	13.21	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Cation-Anion Balance (± 5%)	0.39	%		0.01	SM 1030E	04/03/2012 1207 ALA
Solids, Total Dissolved (Calc)	690	mg/L		10	SM 1030E	04/03/2012 1207 ALA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-001  
**ClientSample ID:** P84665W  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 12:30:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1512	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1402	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1402	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/19/2012 1512	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1402	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1512	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1402	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1512	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1402	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 900	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1402	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1512	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1402	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1402	MS
Uranium	0.0627	mg/L		0.0003	EPA 200.8	03/19/2012 1402	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1402	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1512	DG
<b>Metals - Total</b>							
Iron	0.19	mg/L		0.05	EPA 200.7	03/20/2012 1528	DG
Manganese	0.02	mg/L		0.02	EPA 200.7	03/20/2012 1528	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	36.9	pCi/L		2	SM 7110B	03/27/2012 2205	SH
Gross Alpha Precision (±)	3.1	pCi/L			SM 7110B	03/27/2012 2205	SH
Gross Beta	16.7	pCi/L		3	SM 7110B	03/27/2012 2205	SH
Gross Beta Precision (±)	1.7	pCi/L			SM 7110B	03/27/2012 2205	SH
Radium 226	1.0	pCi/L		0.2	SM 7500-Ra B	03/22/2012 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	03/22/2012 000	SH
Radium 228	ND	pCi/L		1	Ra-05	03/23/2012 1659	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	03/23/2012 1659	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-004  
**ClientSample ID:** SBWELL01  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 1:45:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.07	s.u.			Field	03/14/2012 1345
Conductivity	1161	µmhos/cm			Field	03/14/2012 1345
Dissolved Oxygen	1.37	mg/L			Field	03/14/2012 1345
Dissolved Oxygen (pct)	12.4	%			Field	03/14/2012 1345
Turbidity	0.39	NTU			Field	03/14/2012 1345
Temperature	9.3	°C			Field	03/14/2012 1345
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	547	mg/L		5	SM 2320B	03/19/2012 1427 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	586	mg/L		5	SM 2320B	03/19/2012 1427 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	40	mg/L		5	SM 2320B	03/19/2012 1427 MZ
Chloride	1	mg/L		1	EPA 300.0	03/19/2012 1500 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/19/2012 1427 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/19/2012 1651 MB
Sulfate	96	mg/L		1	EPA 300.0	03/19/2012 1500 AMB
Calcium	2	mg/L		1	EPA 200.7	03/19/2012 1533 DG
Magnesium	ND	mg/L		1	EPA 200.7	03/19/2012 1533 DG
Potassium	3	mg/L		1	EPA 200.7	03/19/2012 1533 DG
Sodium	302	mg/L		1	EPA 200.7	03/19/2012 1533 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2012 1540 MEL
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	03/19/2012 1427 MZ
Electrical Conductivity	1190	µmhos/cm		5	SM 2510B	03/19/2012 1427 MZ
Total Dissolved Solids (180)	730	mg/L		10	SM 2540	03/16/2012 928 ARF
<b>Data Quality</b>						
Cation Sum	13.31	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Anion Sum	12.95	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Cation-Anion Balance (± 5%)	1.36	%		0.01	SM 1030E	04/03/2012 1207 ALA
Solids, Total Dissolved (Calc)	730	mg/L		10	SM 1030E	04/03/2012 1207 ALA

## These results apply only to the samples tested.

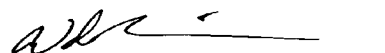
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-004  
**ClientSample ID:** SBWELL01  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 1:45:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1533	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	03/19/2012 1417	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1417	MS
Boron	0.1	mg/L		0.1	EPA 200.7	03/19/2012 1533	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1417	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1533	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1417	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1533	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1417	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 919	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1417	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1533	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1417	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1417	MS
Uranium	0.0017	mg/L		0.0003	EPA 200.8	03/19/2012 1417	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1417	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1533	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/20/2012 1542	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/20/2012 1542	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	03/27/2012 2205	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	03/27/2012 2205	SH
Gross Beta	ND	pCi/L		4	SM 7110B	03/27/2012 2205	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	03/27/2012 2205	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	03/22/2012 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	03/22/2012 000	SH
Radium 228	ND	pCi/L		1	Ra-05	03/23/2012 1659	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	03/23/2012 1659	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-007  
**ClientSample ID:** SBWELL02  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 3:30:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.99	s.u.			Field	03/14/2012 1530
Conductivity	745	µmhos/cm			Field	03/14/2012 1530
Dissolved Oxygen	1.65	mg/L			Field	03/14/2012 1530
Dissolved Oxygen (pct)	14.9	%			Field	03/14/2012 1530
Turbidity	0.16	NTU			Field	03/14/2012 1530
Temperature	9.0	°C			Field	03/14/2012 1530
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	378	mg/L		5	SM 2320B	03/19/2012 1458 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	461	mg/L		5	SM 2320B	03/19/2012 1458 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/19/2012 1458 MZ
Chloride	1	mg/L		1	EPA 300.0	03/19/2012 1631 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	03/19/2012 1458 MZ
Nitrogen, Nitrate-Nitrite (as N)	0.5	mg/L		0.1	EPA 353.2	03/21/2012 1257 MEL
Sulfate	38	mg/L		1	EPA 300.0	03/19/2012 1631 AMB
Calcium	42	mg/L		1	EPA 200.7	03/19/2012 1540 DG
Magnesium	27	mg/L		1	EPA 200.7	03/19/2012 1540 DG
Potassium	17	mg/L		1	EPA 200.7	03/19/2012 1540 DG
Sodium	81	mg/L		1	EPA 200.7	03/19/2012 1540 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	03/20/2012 1543 MEL
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	03/19/2012 1458 MZ
Electrical Conductivity	759	µmhos/cm		5	SM 2510B	03/19/2012 1458 MZ
Total Dissolved Solids (180)	400	mg/L		10	SM 2540	03/30/2012 054 ARF
<b>Data Quality</b>						
Cation Sum	8.21	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Anion Sum	8.40	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Cation-Anion Balance (± 5%)	1.14	%		0.01	SM 1030E	04/03/2012 1207 ALA
Solids, Total Dissolved (Calc)	430	mg/L		10	SM 1030E	04/03/2012 1207 ALA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-007  
**ClientSample ID:** SBWELL02  
**COC:** 143916

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 3:30:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1540	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1457	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1457	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/19/2012 1540	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1457	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1540	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1457	MS
Iron	0.17	mg/L		0.05	EPA 200.7	03/19/2012 1540	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1457	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 924	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1457	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1540	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1457	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1457	MS
Uranium	0.0051	mg/L		0.0003	EPA 200.8	03/19/2012 1457	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1457	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1540	DG
<b>Metals - Total</b>							
Iron	0.29	mg/L		0.05	EPA 200.7	03/20/2012 1549	DG
Manganese	0.06	mg/L		0.02	EPA 200.7	03/20/2012 1549	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.7	pCi/L		2	SM 7110B	03/27/2012 2205	SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	03/27/2012 2205	SH
Gross Beta	14.4	pCi/L		3	SM 7110B	03/27/2012 2205	SH
Gross Beta Precision (±)	1.4	pCi/L			SM 7110B	03/27/2012 2205	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	03/22/2012 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	03/22/2012 000	SH
Radium 228	ND	pCi/L		1	Ra-05	03/23/2012 1659	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	03/23/2012 1659	SH

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-008  
**ClientSample ID:** TWO1  
**COC:** 143917

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 5:00:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.31	s.u.			Field	03/14/2012 1700
Conductivity	2720	µmhos/cm			Field	03/14/2012 1700
Dissolved Oxygen	1.34	mg/L			Field	03/14/2012 1700
Dissolved Oxygen (pct)	11.8	%			Field	03/14/2012 1700
Turbidity	0.00	NTU			Field	03/14/2012 1700
Temperature	8.4	°C			Field	03/14/2012 1700
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	712	mg/L		5	SM 2320B	03/19/2012 1509 MZ
Alkalinity, Bicarbonate as HCO <sub>3</sub>	848	mg/L		5	SM 2320B	03/19/2012 1509 MZ
Alkalinity, Carbonate as CO <sub>3</sub>	10	mg/L		5	SM 2320B	03/19/2012 1509 MZ
Chloride	4	mg/L		1	EPA 300.0	03/19/2012 1642 AMB
Fluoride	1.0	mg/L		0.1	SM 4500FC	03/19/2012 1509 MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/21/2012 1259 MEL
Sulfate	424	mg/L		1	EPA 300.0	03/19/2012 1642 AMB
Calcium	13	mg/L		1	EPA 200.7	03/19/2012 1542 DG
Magnesium	6	mg/L		1	EPA 200.7	03/19/2012 1542 DG
Potassium	10	mg/L		1	EPA 200.7	03/19/2012 1542 DG
Sodium	557	mg/L		1	EPA 200.7	03/19/2012 1542 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/20/2012 1544 MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	03/19/2012 1509 MZ
Electrical Conductivity	2230	µmhos/cm		5	SM 2510B	03/19/2012 1509 MZ
Total Dissolved Solids (180)	1480	mg/L		10	SM 2540	03/16/2012 932 ARF
<b>Data Quality</b>						
Cation Sum	25.65	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Anion Sum	23.25	meq/L		0.01	SM 1030E	04/03/2012 1207 ALA
Cation-Anion Balance (± 5%)	4.91	%		0.01	SM 1030E	04/03/2012 1207 ALA
Solids, Total Dissolved (Calc)	1440	mg/L		10	SM 1030E	04/03/2012 1207 ALA

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/3/2012  
**Report ID:** S1203245001

**ProjectName:** Ross  
**Lab ID:** S1203245-008  
**ClientSample ID:** TWO1  
**COC:** 143917

**WorkOrder:** S1203245  
**CollectionDate:** 3/14/2012 5:00:00 PM  
**DateReceived:** 3/15/2012 8:08:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/19/2012 1542	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/19/2012 1502	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/19/2012 1502	MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/19/2012 1542	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/19/2012 1502	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/19/2012 1542	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/19/2012 1502	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2012 1542	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/19/2012 1502	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/20/2012 926	BK
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/19/2012 1502	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/19/2012 1542	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/19/2012 1502	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/19/2012 1502	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	03/19/2012 1502	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/19/2012 1502	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/19/2012 1542	DG
<b>Metals - Total</b>							
Iron	0.17	mg/L		0.05	EPA 200.7	03/20/2012 1551	DG
Manganese	0.02	mg/L		0.02	EPA 200.7	03/20/2012 1551	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		7	SM 7110B	03/27/2012 2205	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	03/27/2012 2205	SH
Gross Beta	14.7	pCi/L		6	SM 7110B	03/27/2012 2205	SH
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	03/27/2012 2205	SH
Radium 226	0.3	pCi/L		0.2	SM 7500-Ra B	03/22/2012 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	03/22/2012 000	SH
Radium 228	1.2	pCi/L		1	Ra-05	03/23/2012 1659	SH
Radium 228 Precision (±)	1.2	pCi/L			Ra-05	03/23/2012 1659	SH

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P31770W Date: 9-12-12 Time: 1350

**Landowner**

Name: Westover

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NE NW

SEC 6

TWN 52

RNG 67

Picture #(s) —

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P31770W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} Previously  
taken

**Water Quality**

pH 7.94

Cond. 3000

Temp. °C 11.5

Turbidity (ntu) 7.29

D.O. (mg/L) 1.76/17.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water slightly turbid - no odor -  
7 sample bottles - 4.14

LCF  
COC # 143930

*\* No sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P98245W Date: 9-12-12 Time: —

**Landowner**

Name: Westover

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NE NW

SEC 6

TWN 52

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P98245W

**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 - Well not operational,  
but twitter said they would try to get it  
going next quarter.

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TDWELLO1 Date: 9-12-12 Time: 1200

**Landowner**

Name: Davis

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW NW

SEC 7

TWN 52

RNG 67

Picture #(s) 1 (photo01-TDWELLO1)

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat N 44.51168

Long W 104.95690

Elev. —

**Water Quality**

pH 7.31

Cond. 1135

Temp. °C 16.5

Turbidity (ntu) 0.22

D.O. (mg/L) 2.90/30.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Tom Davis house and facility well -  
Tom said well is only 14' deep - water  
clear - no odor - 7 sample bottles - 4.14

LCF

COC # 143930

*X No sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P 14695W Date: 9-12-12 Time: \_\_\_\_\_

**Landowner**

Name: Davis

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENW

SEC 7

TWN 52

RNG 67

Picture #(s) —

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P 14695W

**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 - well not complete.  
I told Tom that if he ever completes well  
and wants it sampled to let me know.

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P20521W Date: 9-13-12 Time: 1200

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW NW

SEC 2

TWN 52

RNG 68

Picture #(s) 5, 6 (PHOTO05-P20521W) Stock ✓  
(PHOTO06-P20521W) Domestic ✓

SEO Permitted Facility Name: Cox #1

Permit No. P20521W

**Location (Decimal Degrees)**

Lat N 44.52694

Long W 105.00071

Elev.       

**Water Quality**

pH 7.68

Cond. 706

Temp. °C 9.7

Turbidity (ntu) 184

D.O. (mg/L) 5.21/48.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: ~80°F

Comments: Hopper Cox homestead well - collected  
sample from valve inside of well shelter -  
water turbid (let water run for 15+ min. -  
no odor - 7 sample bottles - 4.14

HCF  
COC # 143930

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: ARLOI Date: 9-12-12 Time: 1530

**Landowner**

Name: Reynolds

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NE SW

SEC 5

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} *Previously  
Collected*

**Water Quality**

pH 7.61

Cond. 1769

Temp. °C 15.7

Turbidity (ntu) 2.00

D.O. (mg/L) 3.10/31.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: 270°F

Comments: Bret Reynolds new house well - inside  
facet - water clear - no odor - 7 sample bottles -  
4.14

LCF  
COC # 1439.30

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELLO3 Date: 8-1-12 Time: 1600

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 5

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7324P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.63

Cond. 1802  $\mu$ S

Temp. °C 10.7

Turbidity (ntu) 4.75

D.O. (mg/L) 1.37/13.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: water clear - no odor - 5 sample  
bottles - no 4.14

COC # 143920



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELLO1 Date: 9-11-12 Time: 1415

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENE

SEC 6

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7328P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} previously  
collected

**Water Quality**

pH 8.00

Cond. 733  $\mu$ S

Temp. °C 11.6

Turbidity (ntu) 26.6

D.O. (mg/L) 2.02 / 20.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: 75°F

Comments: Water slightly turbid - no odor -  
7 sample bottles - 4.14

LCF  
COC # 143928

\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELL02 Date: 9-11-12 Time: 1515

Landowner

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NE SW

SEC 6

TWN 53

RNG 67

Picture #(s) previously taken

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7331P

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} previously taken

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 not functioning. NO  
Sample Collected

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TW01 Date: 8-1-12 Time: 1230

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NE SE

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.98

Cond. 1905

Temp. °C 17.8

Turbidity (ntu) 0.57

D.O. (mg/L) 1.44 / 15.7

Water Level (ft): —

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: Hot 95°F

Comments: Water clear no odor - 5 sample  
bottles - no 4.14

COC # 143920

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELLO4 Date: 8-1-12 Time: 1630

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7326P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.38

Cond. 1631  $\mu$ S

Temp. °C 11.2

Turbidity (ntu) 6.31

D.O. (mg/L) 1.53 / 15.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5  
sample bottles - no 4.14

COC # 143920

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TW02 Date: 8-1-12 Time: 1330

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P103666W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.10

Cond. 2.70 mS

Temp. °C 17.3

Turbidity (ntu) 2.47

D.O. (mg/L) 1.12/12.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Collected sample from outside  
frost free hydrant. Water clear no odor -  
5 sample bottles - no 4.14

CDC # 143920

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: HBWELL05 Date: 8-15-12 Time: 1410

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7430P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.83

Cond. 1574  $\mu$ S

Temp. °C 10.1

Turbidity (ntu) 304

D.O. (mg/L) 3.93/35.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water turbid - Rust colored - ran  
water for 10+ minutes - started to run out  
of water - 5 sample bottles - no 4.14

COC # 143924

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: ARH02 Date: 9-12-12 Time: 1600

**Landowner**

Name: Reynolds

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW NW

SEC 9

TWN 53

RNG 67

Picture #(s) —

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. —

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} Previously  
collected

**Water Quality**

pH 7.26

Cond. 3440

Temp. °C 11.7

Turbidity (ntu) 0.11

D.O. (mg/L) 1.65/15.7

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water collected in Alberta's house  
inside facet - water clear no odor -  
7 sample bottles - 4.14

LCF  
COC # 143930

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: DW WELLOI Date: 8-2-12 Time: 1300

**Landowner**

Name: WOOD

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNW

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 8.31

Cond. 2.95 mS

Temp. °C 13.0

Turbidity (ntu) 2.81

D.O. (mg/L) 1.46/14.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - noticed  
that there is not near the amount of  
water from frost free hydrant as there  
was in the past. - 5 sample bottles -  
no 4.14

COC # 143921



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 19XX18 Date: 8-1-12 Time: 1440

**Landowner**

Name: Mesit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 18

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

~~Ind.~~ ✓  
~~Stock~~

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P67747W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.69

Cond. 3.11

Temp. °C 14.5

Turbidity (ntu) 0.50

D.O. (mg/L) 2.95 / 30.2

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - not fizzy -  
5 sample bottles - no 4.14

COC # 143920

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: 22X-19 Date: 8-1-12 Time: 1515

**Landowner**

Name: Merit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SENW

SEC 19

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

~~Fuel.~~  
~~Stock~~ ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50917W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.95

Cond. 1822  $\mu$ S

Temp. °C 13.3

Turbidity (ntu) 0.24

D.O. (mg/L) 1.25 / 12.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - fizzy -  
5 sample bottles - no 4.14

COC # 143920

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: CSWELL01 Date: 8-2-12 Time: 1130

**Landowner**

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW NW

SEC 20

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P132537W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.05

Cond. 2.70 mS

Temp. °C 16.1

Turbidity (ntu) 0.56

D.O. (mg/L) 1.18 / 12.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5 sample  
bottles - no 4.14

COC# 143921

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: CSWELL03 Date: 8-2-12 Time: 1200

**Landowner**

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENE

SEC 30

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P619W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.92

Cond. 640  $\mu$ S

Temp. °C 11.6

Turbidity (ntu) 3.53

D.O. (mg/L) 1.42 / 13.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5 sample  
bottles - no 4.14 -

COC # 143921

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P17177W Date: 8-15-12 Time: 1200

**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: \_\_\_\_\_

Permit No. P17177W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.15

Cond. 795  $\mu$ S

Temp. °C 9.9

Turbidity (ntu) 0.00

D.O. (mg/L) 1.51 / 13.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: East stock tank well by creek -  
water creek - no odor - 5 sample bottles -  
no 4.14

COC # 143923

\* FD - Field Duplicate

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: FD-P17177W Date: 8-15-12 Time: 1230

**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 8.18

Cond. 787  $\mu$ S

Temp. °C 10.1

Turbidity (ntu) 0.00

D.O. (mg/L) 1.20/10.9

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Field Duplicate

COC # 143923

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SBWELL 02 Date: 8-15-12 Time: 1300

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 1

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. —

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.80

Cond. 685  $\mu$ S

Temp. °C 9.5

Turbidity (ntu) 0.71

D.O. (mg/L) 1.67 / 15.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Fast Stock Tank by reservoir -  
water clear - no odor - 5 sample bottles -  
no 4.14.

COC # 143923

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P84665W Date: 8-15-12 Time: 1000

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW/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 7.49

Cond. 936  $\mu$ S

Temp. °C 9.5

Turbidity (ntu) 0.79

D.O. (mg/L) 2.90/26.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: 60°F ± 5°

Comments: Windmill well - Water clear -  
no odor - 5 sample bottles - no 4.14

COC # 143923



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P50113W Date: 8-15-12 Time: 1050

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50113W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.49

Cond. 1387  $\mu$ S

Temp. °C 9.0

Turbidity (ntu) 0.01

D.O. (mg/L) 2.46 / 22.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Stock tank well on creek by main  
facility - water clear - no odor - 5 sample  
bottles - no 4.14

COC # 143923

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SBWELL01 Date: 8-15-12 Time: 1115

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

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 9.08

Cond. 1148  $\mu$ S

Temp. °C 12.6

Turbidity (ntu) 0.15

D.O. (mg/L) 1.56/15.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Main facility well - Water clear -  
no odor - 5 sample bottles - no 4.14

COC # 143923

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P71108W-RAW Date: 8-15-12 Time: 1330

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SENE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P71108W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.48

Cond. 1597µS

Temp. °C 11.6

Turbidity (ntu) 0.00

D.O. (mg/L) 1.39/13.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Dallas and Anna's house well - water  
clear - no odor - 5 sample bottles - no  
4.14

COC # 143923

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TWWELO3 Date: 8-1-12 Time: 1400

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESE

SEC 12

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P192896W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.99

Cond. 1448  $\mu$ S

Temp. °C 11.9

Turbidity (ntu) 0.15

D.O. (mg/L) 2.94 / 28.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 5  
sample bottles - no 4.14

COCH 143920

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P42868W Date: 9-12-12 Time: 0910

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWSE

SEC 14

TWN 53

RNG 68

Picture #(s) —

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P42868W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} *Previously  
collected*

**Water Quality**

pH 9.16

Cond. 1297

Temp. °C 11.0

Turbidity (ntu) 4.10

D.O. (mg/L) 1.70/16.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: —

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: ~ 65°F

Comments: Frost-free hydrant by homestead house -  
water clear - no odor - 7 sample bottles -  
4.14

LCF

COC # 143930

*\* Field Duplicate*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: FD-P42868W Date: 9-13-12 Time: 0920

**Landowner**

Name: Hahn

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 9.17

Cond. 1291

Temp. °C 11.3

Turbidity (ntu) 2.63

D.O. (mg/L) 1.61/15.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Field Duplicate

LCF  
CC # 143930

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61006W Date: 9-13-12 Time: 1340

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61006W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} Previously  
Collected

**Water Quality**

pH 8.19

Cond. 1010

Temp. °C 10.6

Turbidity (ntu) 2.58

D.O. (mg/L) 1.65/15.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC #131191

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61007W Date: 9-13-12 Time: 1300

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) —

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61007W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} previously  
collected

**Water Quality**

pH 8.61

Cond. 1079

Temp. °C 11.2

Turbidity (ntu) 11.25

D.O. (mg/L) 1.92/18.6

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: ≈ 80°F

Comments: Water slightly turbid - no odor - 7  
sample bottles - 4.14

LCF  
COC # 131191



\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P55196W Date: 9-13-12 Time: 1100

Landowner

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SE NW

SEC 27

TWN 53

RNG 68

Picture #(s) 3, 4 (Photo03-P55196W)  
(Photo04-P55196W)

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

Location (Decimal Degrees)

Lat 44.55263

Long 105.01748

Elev. 4430

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 that is used to fill small  
reservoir - Well not functioning (electrical  
problem) - Jim will fix so it can be  
sampled next 1/4 or next trip.

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: SEIWELLO1 Date: 9-11-12 Time: 1700  
WAS PHWELLO1

**Landowner**

Name: Strata Energy, Inc

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE SE

SEC 25

TWN 53

RNG 68

Picture #(s) —

Stock \_\_\_\_\_

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P22584P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

} previously  
collected

**Water Quality**

pH 9.72

Cond. 1023  $\mu$ S

Temp. °C 11.5

Turbidity (ntu) 1.59

D.O. (mg/L) 2.21 21.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Strata's field office well - water  
clear - no odor - 7 sample bottles - 4.14

LCP  
COG# 143928

*\* Field Duplicate*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: FD - SEI WELL 01 Date: 9-11-12 Time: 1710  
WAS PHWELL 01

**Landowner**

Name: Strata Energy

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 9.72

Cond. 1023

Temp. °C 11.9

Turbidity (ntu) 0.65

D.O. (mg/L) 2.12/20.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: \* Field duplicate

LCF  
COC# 143928

**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-002  
**ClientSample ID:** P31770W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 1:50:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.94	s.u.			Field	09/12/2012 1350
Conductivity	3000	µmhos/cm			Field	09/12/2012 1350
Dissolved Oxygen	1.76	mg/L			Field	09/12/2012 1350
Dissolved Oxygen (pct)	17.1	%			Field	09/12/2012 1350
Turbidity	7.29	NTU			Field	09/12/2012 1350
Temperature	11.5	°C			Field	09/12/2012 1350
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	500	mg/L		5	SM 2320B	09/17/2012 2109 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	583	mg/L		5	SM 2320B	09/17/2012 2109 KV
Alkalinity, Carbonate as CO <sub>3</sub>	13	mg/L		5	SM 2320B	09/17/2012 2109 KV
Chloride	20	mg/L		1	EPA 300.0	09/18/2012 524 AM
Fluoride	0.3	mg/L		0.1	SM 4500FC	09/17/2012 2109 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	09/25/2012 1246 RH
Sulfate	797	mg/L		1	EPA 300.0	09/18/2012 524 AM
Calcium	55	mg/L		1	EPA 200.7	09/14/2012 2048 DG
Magnesium	22	mg/L		1	EPA 200.7	09/14/2012 2048 DG
Potassium	13	mg/L		1	EPA 200.7	09/14/2012 2048 DG
Sodium	573	mg/L		1	EPA 200.7	09/14/2012 2048 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1340 RH
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	09/17/2012 2109 KV
Electrical Conductivity	2530	µmhos/cm		5	SM 2510B	09/17/2012 2109 KV
Total Dissolved Solids (180)	1840	mg/L		10	SM 2540	09/15/2012 1250 JCG
<b>Data Quality</b>						
Cation Sum	29.79	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	27.15	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	4.64	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	1780	mg/L		10	SM 1030E	09/28/2012 1417 WN

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

Page 4 of 27

**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-002  
**ClientSample ID:** P31770W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 1:50:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2048 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/14/2012 1959 MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 1959 MS
Boron	0.3	mg/L		0.1	EPA 200.7	09/14/2012 2048 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 1959 MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2048 DG
Copper	ND	mg/L		0.01	EPA 200.8	09/17/2012 1504 MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2048 DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 1959 MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1224 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 1959 MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2048 DG
Selenium	ND	mg/L		0.005	EPA 200.8	09/14/2012 1959 MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1504 MS
Uranium	0.0031	mg/L		0.0003	EPA 200.8	09/14/2012 1959 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 1959 MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 2048 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1438 MS
<b>Metals - Total</b>						
Iron	4.31	mg/L		0.05	EPA 200.7	09/18/2012 1616 DG
Manganese	0.19	mg/L		0.02	EPA 200.7	09/18/2012 1616 DG

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-002  
**ClientSample ID:** P31770W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 1:50:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	4.4	pCi/L		4	SM 7110B	10/01/2012 000 SH
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	10/01/2012 000 SH
Gross Beta	ND	pCi/L		8	SM 7110B	10/01/2012 000 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	10/01/2012 000 SH
Lead 210	ND	pCi/L		1	OTW01	10/05/2012 1304 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/05/2012 1304 SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1540 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1540 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/02/2012 1110 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/24/2012 154 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/24/2012 154 WN
Thorium 230	ND	pCi/L		0.2	ACW10	09/28/2012 804 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/28/2012 804 MB
Thorium 229 Tracer (30-120)	88.6	%		0.2	ACW10	09/28/2012 804 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	10/11/2012 000 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 000 SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2012 1516 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 1516 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219 SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/04/2012 1108 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/04/2012 1108 MB
Thorium 229 Tracer (30-120)	81.2	%		0.2	ACW10	10/04/2012 1108 MB

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-001  
**ClientSample ID:** TD WELL01  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 12:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.31	s.u.			Field	09/12/2012 1200
Conductivity	1135	µmhos/cm			Field	09/12/2012 1200
Dissolved Oxygen	2.90	mg/L			Field	09/12/2012 1200
Dissolved Oxygen (pct)	30.5	%			Field	09/12/2012 1200
Turbidity	0.22	NTU			Field	09/12/2012 1200
Temperature	16.5	°C			Field	09/12/2012 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	453	mg/L		5	SM 2320B	09/17/2012 2056 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	545	mg/L		5	SM 2320B	09/17/2012 2056 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	09/17/2012 2056 KV
Chloride	18	mg/L		1	EPA 300.0	09/18/2012 515 AM
Fluoride	0.2	mg/L		0.1	SM 4500FC	09/17/2012 2056 KV
Nitrogen, Nitrate+Nitrite (as N)	1.3	mg/L		0.1	EPA 353.2	09/25/2012 1245 RH
Sulfate	252	mg/L		1	EPA 300.0	09/18/2012 515 AM
Calcium	126	mg/L		1	EPA 200.7	09/14/2012 2046 DG
Magnesium	61	mg/L		1	EPA 200.7	09/14/2012 2046 DG
Potassium	3	mg/L		1	EPA 200.7	09/14/2012 2046 DG
Sodium	71	mg/L		1	EPA 200.7	09/14/2012 2046 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1339 RH
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	09/17/2012 2056 KV
Electrical Conductivity	1240	µmhos/cm		5	SM 2510B	09/17/2012 2056 KV
Total Dissolved Solids (180)	830	mg/L		10	SM 2540	09/15/2012 1249 JCG
<b>Data Quality</b>						
Cation Sum	14.48	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	14.90	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	1.44	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	09/28/2012 1417 WN

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

Page 1 of 27

**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-001  
**ClientSample ID:** TD WELL01  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 12:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2046 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/14/2012 1954 MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 1954 MS
Boron	ND	mg/L		0.1	EPA 200.7	09/14/2012 2046 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 1954 MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2046 DG
Copper	0.03	mg/L		0.01	EPA 200.8	09/17/2012 1445 MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2046 DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 1954 MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1222 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 1954 MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2046 DG
Selenium	0.023	mg/L		0.005	EPA 200.8	09/14/2012 1954 MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1445 MS
Uranium	0.0211	mg/L		0.0003	EPA 200.8	09/14/2012 1954 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 1954 MS
Zinc	0.05	mg/L		0.01	EPA 200.7	09/14/2012 2046 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1433 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	09/18/2012 1614 DG
Manganese	0.02	mg/L		0.02	EPA 200.7	09/18/2012 1614 DG

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-001  
**ClientSample ID:** TD WELL01  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 12:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	15.2	pCi/L		3	SM 7110B	10/01/2012 000	SH
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	10/01/2012 000	SH
Gross Beta	5.3	pCi/L		4	SM 7110B	10/01/2012 000	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	10/01/2012 000	SH
Lead 210	ND	pCi/L		1	OTW01	09/28/2012 1201	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	09/28/2012 1201	SH
Polonium 210	ND	pCi/L		1	OTW01	09/27/2012 1350	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	09/27/2012 1350	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	10/02/2012 1110	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/23/2012 2253	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/23/2012 2253	WN
Thorium 230	ND	pCi/L		0.2	ACW10	09/25/2012 1632	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/25/2012 1632	MB
Thorium 229 Tracer (30-120)	75.5	%		0.2	ACW10	09/25/2012 1632	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	10/11/2012 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 000	SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2012 1516	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 1516	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/04/2012 1108	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/04/2012 1108	MB
Thorium 229 Tracer (30-120)	70.7	%		0.2	ACW10	10/04/2012 1108	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-007  
**ClientSample ID:** P20521W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 12:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.68	s.u.			Field	09/13/2012 1200
Conductivity	706	µmhos/cm			Field	09/13/2012 1200
Dissolved Oxygen	5.21	mg/L			Field	09/13/2012 1200
Dissolved Oxygen (pct)	48.4	%			Field	09/13/2012 1200
Turbidity	184.00	NTU			Field	09/13/2012 1200
Temperature	9.7	°C			Field	09/13/2012 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	258	mg/L		5	SM 2320B	09/17/2012 2222 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	305	mg/L		5	SM 2320B	09/17/2012 2222 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	09/17/2012 2222 KV
Chloride	31	mg/L		1	EPA 300.0	09/18/2012 611 AM
Fluoride	0.3	mg/L		0.1	SM 4500FC	09/17/2012 2222 KV
Nitrogen, Nitrate+Nitrite (as N)	12.2	mg/L		0.1	EPA 353.2	09/25/2012 1252 RH
Sulfate	18	mg/L		1	EPA 300.0	09/18/2012 611 AM
Calcium	65	mg/L		1	EPA 200.7	09/20/2012 1523 BK
Magnesium	35	mg/L		1	EPA 200.7	09/20/2012 1523 BK
Potassium	8	mg/L		1	EPA 200.7	09/20/2012 1523 BK
Sodium	16	mg/L		1	EPA 200.7	09/20/2012 1523 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1345 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	09/17/2012 2222 KV
Electrical Conductivity	711	µmhos/cm		5	SM 2510B	09/17/2012 2222 KV
Total Dissolved Solids (180)	400	mg/L		10	SM 2540	09/15/2012 1256 JCG
<b>Data Quality</b>						
Cation Sum	7.00	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	7.27	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	1.92	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	380	mg/L		10	SM 1030E	09/28/2012 1417 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-007  
**ClientSample ID:** P20521W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 12:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2114 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/14/2012 2048 MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 2048 MS
Boron	ND	mg/L		0.1	EPA 200.7	09/14/2012 2114 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 2048 MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2114 DG
Copper	ND	mg/L		0.01	EPA 200.8	09/14/2012 2048 MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2114 DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 2048 MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1246 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 2048 MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2114 DG
Selenium	0.020	mg/L		0.005	EPA 200.8	09/14/2012 2048 MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1539 MS
Uranium	0.0177	mg/L		0.0003	EPA 200.8	09/14/2012 2048 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 2048 MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 2114 DG
<b>Metals - Suspended</b>						
Uranium	0.0012	mg/L		0.0003	EPA 200.8	09/21/2012 1528 MS
<b>Metals - Total</b>						
Iron	20.9	mg/L		0.05	EPA 200.7	09/18/2012 1642 DG
Manganese	0.68	mg/L		0.02	EPA 200.7	09/18/2012 1642 DG

## These results apply only to the samples tested.

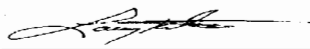
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-007  
**ClientSample ID:** P20521W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 12:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	11.2	pCi/L		2	SM 7110B	10/01/2012 000	SH
Gross Alpha Precision (±)	1.7	pCi/L			SM 7110B	10/01/2012 000	SH
Gross Beta	8.8	pCi/L		3	SM 7110B	10/01/2012 000	SH
Gross Beta Precision (±)	1.5	pCi/L			SM 7110B	10/01/2012 000	SH
Lead 210	1.5	pCi/L		1	OTW01	10/08/2012 1038	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	10/08/2012 1038	SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1702	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1702	SH
Radium 226	1.1	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	10/02/2012 1110	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/24/2012 1659	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/24/2012 1659	WN
Thorium 230	ND	pCi/L		0.2	ACW10	09/28/2012 804	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/28/2012 804	MB
Thorium 229 Tracer (30-120)	83.3	%		0.2	ACW10	09/28/2012 804	MB
<b>Radionuclides - Suspended</b>							
Lead 210	27.8	pCi/L		1	OTW01	10/11/2012 000	SH
Lead 210 Precision (±)	1.3	pCi/L			OTW01	10/11/2012 000	SH
Polonium 210	2.7	pCi/L		1	OTW01	10/11/2012 1727	SH
Polonium 210 Precision (±)	0.6	pCi/L			OTW01	10/11/2012 1727	SH
Radium 226	3.1	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	10/04/2012 1219	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/05/2012 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/05/2012 813	MB
Thorium 229 Tracer (30-120)	77.9	%		0.2	ACW10	10/05/2012 813	MB

## These results apply only to the samples tested.

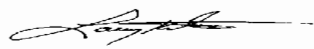
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-003  
**ClientSample ID:** ARL01  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 3:30:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.61	s.u.			Field	09/12/2012 1530
Conductivity	1769	µmhos/cm			Field	09/12/2012 1530
Dissolved Oxygen	3.10	mg/L			Field	09/12/2012 1530
Dissolved Oxygen (pct)	31.9	%			Field	09/12/2012 1530
Turbidity	2.0	NTU			Field	09/12/2012 1530
Temperature	15.7	°C			Field	09/12/2012 1530
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	364	mg/L		5	SM 2320B	09/17/2012 2121 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	426	mg/L		5	SM 2320B	09/17/2012 2121 KV
Alkalinity, Carbonate as CO <sub>3</sub>	9	mg/L		5	SM 2320B	09/17/2012 2121 KV
Chloride	6	mg/L		1	EPA 300.0	09/18/2012 534 AM
Fluoride	0.4	mg/L		0.1	SM 4500FC	09/17/2012 2121 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	09/25/2012 1247 RH
Sulfate	531	mg/L		1	EPA 300.0	09/18/2012 534 AM
Calcium	12	mg/L		1	EPA 200.7	09/14/2012 2050 DG
Magnesium	4	mg/L		1	EPA 200.7	09/14/2012 2050 DG
Potassium	3	mg/L		1	EPA 200.7	09/14/2012 2050 DG
Sodium	441	mg/L		1	EPA 200.7	09/20/2012 1521 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1341 RH
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	09/17/2012 2121 KV
Electrical Conductivity	1890	µmhos/cm		5	SM 2510B	09/17/2012 2121 KV
Total Dissolved Solids (180)	1250	mg/L		10	SM 2540	09/15/2012 1251 JCG
<b>Data Quality</b>						
Cation Sum	20.12	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	18.52	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	4.13	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	1210	mg/L		10	SM 1030E	09/28/2012 1417 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-003  
**ClientSample ID:** ARL01  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 3:30:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2050 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/14/2012 2004 MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 2004 MS
Boron	0.2	mg/L		0.1	EPA 200.7	09/14/2012 2050 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 2004 MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2050 DG
Copper	ND	mg/L		0.01	EPA 200.8	09/17/2012 1509 MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2050 DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 2004 MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1233 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 2004 MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2050 DG
Selenium	0.010	mg/L		0.005	EPA 200.8	09/14/2012 2004 MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1509 MS
Uranium	0.0487	mg/L		0.0003	EPA 200.8	09/14/2012 2004 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 2004 MS
Zinc	0.05	mg/L		0.01	EPA 200.7	09/14/2012 2050 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1443 MS
<b>Metals - Total</b>						
Iron	0.10	mg/L		0.05	EPA 200.7	09/18/2012 1619 DG
Manganese	0.05	mg/L		0.02	EPA 200.7	09/18/2012 1619 DG

**These results apply only to the samples tested.**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

**RL - Reporting Limit**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-003  
**ClientSample ID:** ARL01  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 3:30:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	27.3	pCi/L		4	SM 7110B	10/01/2012 000 SH
Gross Alpha Precision (±)	4.3	pCi/L			SM 7110B	10/01/2012 000 SH
Gross Beta	13.9	pCi/L		7	SM 7110B	10/01/2012 000 SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	10/01/2012 000 SH
Lead 210	2.2	pCi/L		1	OTW01	10/05/2012 1304 SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/05/2012 1304 SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1540 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1540 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/02/2012 1110 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/24/2012 455 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/24/2012 455 WN
Thorium 230	ND	pCi/L		0.2	ACW10	09/28/2012 804 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/28/2012 804 MB
Thorium 229 Tracer (30-120)	89.2	%L		0.2	ACW10	09/28/2012 804 MB
<b>Radionuclides - Suspended</b>						
Lead 210	1.2	pCi/L		1	OTW01	10/11/2012 000 SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/11/2012 000 SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2012 1516 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 1516 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219 SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/05/2012 813 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/05/2012 813 MB
Thorium 229 Tracer (30-120)	72.2	%		0.2	ACW10	10/05/2012 813 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 10/2/2012  
**Report ID:** S1208062002  
(Replaces S1208062001)

**ProjectName:** Ross  
**Lab ID:** S1208062-006  
**ClientSample ID:** HBWELL03  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 4:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.63	s.u.			Field	08/01/2012 1600
Conductivity	1802	µmhos/cm			Field	08/01/2012 1600
Dissolved Oxygen	1.37	mg/L			Field	08/01/2012 1600
Dissolved Oxygen (pct)	13.0	%			Field	08/01/2012 1600
Turbidity	4.75	NTU			Field	08/01/2012 1600
Temperature	10.6	°C			Field	08/01/2012 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	524	mg/L		5	SM 2320B	08/03/2012 1817 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	639	mg/L		5	SM 2320B	08/03/2012 1817 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/03/2012 1817 KV
Chloride	13	mg/L		1	EPA 300.0	08/03/2012 1759 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/03/2012 1817 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 959 RH
Sulfate	506	mg/L		1	EPA 300.0	08/03/2012 1759 AMB
Calcium	93	mg/L		1	EPA 200.7	08/03/2012 1641 DG
Magnesium	47	mg/L		1	EPA 200.7	08/03/2012 1641 DG
Potassium	17	mg/L		1	EPA 200.7	08/03/2012 1641 DG
Sodium	293	mg/L		1	EPA 200.7	08/03/2012 1641 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/06/2012 1531 MEL
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	08/03/2012 1817 KV
Electrical Conductivity	1790	µmhos/cm		5	SM 2510B	08/03/2012 1817 KV
Total Dissolved Solids (180)	1290	mg/L		10	SM 2540	08/03/2012 1347 PR
<b>Data Quality</b>						
Cation Sum	21.68	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	21.38	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	0.70	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1280	mg/L		10	SM 1030E	08/10/2012 1146 KO

These results apply only to the samples tested.

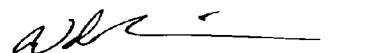
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1208062-006  
**ClientSample ID:** HBWELL03  
**COC:** 124920 143921 14392

**Date Reported:** 10/2/2012  
**Report ID:** S1208062002  
(Replaces S1208062001)

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 4:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1641 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1451 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1451 MS
Boron	0.2	mg/L		0.1	EPA 200.7	08/03/2012 1641 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1451 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1641 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1451 MS
Iron	3.31	mg/L		0.05	EPA 200.7	08/03/2012 1641 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1451 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1018 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1451 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1641 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1451 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1451 MS
Uranium	0.0021	mg/L		0.0003	EPA 200.8	08/03/2012 1451 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1451 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/03/2012 1641 DG
<b>Metals - Total</b>						
Iron	4.71	mg/L		0.05	EPA 200.7	08/06/2012 1421 DG
Manganese	0.22	mg/L		0.02	EPA 200.7	08/06/2012 1421 DG
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		4	SM 7110B	08/18/2012 1155 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	08/18/2012 1155 SH
Gross Beta	15.9	pCi/L		8	SM 7110B	08/18/2012 1155 SH
Gross Beta Precision (±)	4.8	pCi/L			SM 7110B	08/18/2012 1155 SH
Radium 226	0.9	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	08/14/2012 1610 SH
Radium 228	1.41	pCi/L		1	Ga-Tech	08/23/2012 1933 AA
Radium 228 Precision (±)	0.98	pCi/L			Ga-Tech	08/23/2012 1933 AA

## These results apply only to the samples tested.

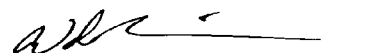
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-001  
**ClientSample ID:** HB WELL01  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 2:15:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.0	s.u.			Field	09/11/2012 1415
Conductivity	733	µmhos/cm			Field	09/11/2012 1415
Dissolved Oxygen	2.02	mg/L			Field	09/11/2012 1415
Dissolved Oxygen (pct)	20.1	%			Field	09/11/2012 1415
Turbidity	26.6	NTU			Field	09/11/2012 1415
Temperature	11.6	°C			Field	09/11/2012 1415
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	361	mg/L		5	SM 2320B	09/14/2012 2005 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	426	mg/L		5	SM 2320B	09/14/2012 2005 KV
Alkalinity, Carbonate as CO <sub>3</sub>	7	mg/L		5	SM 2320B	09/14/2012 2005 KV
Chloride	7	mg/L		1	EPA 300.0	09/18/2012 409 AM
Fluoride	0.1	mg/L		0.1	SM 4500FC	09/14/2012 2005 KV
Nitrogen, Nitrate+Nitrite (as N)	1.3	mg/L		0.1	EPA 353.2	09/17/2012 1641 RH
Sulfate	57	mg/L		1	EPA 300.0	09/18/2012 409 AM
Calcium	60	mg/L		1	EPA 200.7	09/14/2012 1636 DG
Magnesium	51	mg/L		1	EPA 200.7	09/14/2012 1636 DG
Potassium	19	mg/L		1	EPA 200.7	09/14/2012 1636 DG
Sodium	24	mg/L		1	EPA 200.7	09/14/2012 1636 DG
Nitrogen, Ammonia (As N)	0.7	mg/L		0.1	EPA 350.1	09/21/2012 1331 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	09/14/2012 2005 KV
Electrical Conductivity	773	µmhos/cm		5	SM 2510B	09/14/2012 2005 KV
Total Dissolved Solids (180)	470	mg/L		10	SM 2540	09/15/2012 1153 JCG
<b>Data Quality</b>						
Cation Sum	8.68	meq/L		0.01	SM 1030E	09/19/2012 1615 LJK
Anion Sum	8.69	meq/L		0.01	SM 1030E	09/19/2012 1615 LJK
Cation-Anion Balance (± 5%)	0.07	%		0.01	SM 1030E	09/19/2012 1615 LJK
Solids, Total Dissolved (Calc)	440	mg/L		10	SM 1030E	09/19/2012 1615 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 9



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-001  
**ClientSample ID:** HB WELL01  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 2:15:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 1636	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/13/2012 2218	MS
Barium	ND	mg/L		0.5	EPA 200.8	09/13/2012 2218	MS
Boron	ND	mg/L		0.1	EPA 200.7	09/14/2012 1636	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/13/2012 2218	MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 1636	DG
Copper	ND	mg/L		0.01	EPA 200.8	09/13/2012 2218	MS
Iron	0.15	mg/L		0.05	EPA 200.7	09/14/2012 1636	DG
Lead	ND	mg/L		0.02	EPA 200.8	09/13/2012 2218	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1138	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/13/2012 2218	MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 1636	DG
Selenium	ND	mg/L		0.005	EPA 200.8	09/13/2012 2218	MS
Silver	ND	mg/L		0.003	EPA 200.8	09/13/2012 2218	MS
Uranium	0.0121	mg/L		0.0003	EPA 200.8	09/13/2012 2218	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/13/2012 2218	MS
Zinc	0.02	mg/L		0.01	EPA 200.7	09/14/2012 1636	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1403	MS
<b>Metals - Total</b>							
Iron	10.7	mg/L		0.05	EPA 200.7	09/18/2012 1549	DG
Manganese	0.11	mg/L		0.02	EPA 200.7	09/18/2012 1549	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-001  
**ClientSample ID:** HB WELL01  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 2:15:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	8.8	pCi/L		2	SM 7110B	09/25/2012 036	SH
Gross Alpha Precision (±)	2.4	pCi/L			SM 7110B	09/25/2012 036	SH
Gross Beta	16.0	pCi/L		3	SM 7110B	09/25/2012 036	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	09/25/2012 036	SH
Lead 210	ND	pCi/L		1	OTW01	10/05/2012 1304	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/05/2012 1304	SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1540	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1540	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	09/27/2012 1017	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/27/2012 1017	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/30/2012 1758	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/30/2012 1758	AA
Thorium 230	ND	pCi/L		0.2	ACW10	09/25/2012 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/25/2012 000	MB
Thorium 229 Tracer (30-120)	77.3	%		0.2	ACW10	09/25/2012 000	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.0	pCi/L		1	OTW01	10/04/2012 1215	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	10/04/2012 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	10/03/2012 1303	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/03/2012 1303	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/04/2012 1108	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/04/2012 1108	MB
Thorium 229 Tracer (30-120)	74.5	%		0.2	ACW10	10/04/2012 1108	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-001  
**ClientSample ID:** TWO1  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 12:30:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.98	s.u.			Field	08/01/2012 1230
Conductivity	1905	µmhos/cm			Field	08/01/2012 1230
Dissolved Oxygen	1.44	mg/L			Field	08/01/2012 1230
Dissolved Oxygen (pct)	15.7	%			Field	08/01/2012 1230
Turbidity	0.57	NTU			Field	08/01/2012 1230
Temperature	17.8	°C			Field	08/01/2012 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	707	mg/L		5	SM 2320B	08/03/2012 1715 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	823	mg/L		5	SM 2320B	08/03/2012 1715 KV
Alkalinity, Carbonate as CO <sub>3</sub>	19	mg/L		5	SM 2320B	08/03/2012 1715 KV
Chloride	5	mg/L		1	EPA 300.0	08/03/2012 1601 AMB
Fluoride	0.9	mg/L		0.1	SM 4500FC	08/03/2012 1715 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 953 RH
Sulfate	463	mg/L		1	EPA 300.0	08/03/2012 1601 AMB
Calcium	18	mg/L		1	EPA 200.7	08/03/2012 1627 DG
Magnesium	9	mg/L		1	EPA 200.7	08/03/2012 1627 DG
Potassium	9	mg/L		1	EPA 200.7	08/03/2012 1627 DG
Sodium	549	mg/L		1	EPA 200.7	08/03/2012 1627 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	08/06/2012 1521 MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	08/03/2012 1715 KV
Electrical Conductivity	2110	µmhos/cm		5	SM 2510B	08/03/2012 1715 KV
Total Dissolved Solids (180)	1500	mg/L		10	SM 2540	08/03/2012 1341 PR
<b>Data Quality</b>						
Cation Sum	25.79	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	23.97	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	3.65	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1480	mg/L		10	SM 1030E	08/10/2012 1146 KO

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- B Analyte detected in the associated Method Blank
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-001  
**ClientSample ID:** TWO1  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 12:30:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1627	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1402	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1402	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/03/2012 1627	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1402	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1627	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1402	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/03/2012 1627	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1402	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 956	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1402	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1627	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1402	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1402	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/03/2012 1402	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1402	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/03/2012 1627	DG
<b>Metals - Total</b>							
Iron	0.08	mg/L		0.05	EPA 200.7	08/06/2012 1400	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/06/2012 1400	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	4.0	pCi/L		3	SM 7110B	08/18/2012 1155	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	08/18/2012 1155	SH
Gross Beta	ND	pCi/L		7	SM 7110B	08/18/2012 1155	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	08/18/2012 1155	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	08/14/2012 1610	SH
Radium 228	1.13	pCi/L		1	Ga-Tech	08/22/2012 1705	AA
Radium 228 Precision (±)	0.98	pCi/L			Ga-Tech	08/22/2012 1705	AA

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- B Analyte detected in the associated Method Blank
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/2/2012  
**Report ID:** S1208062002  
(Replaces S1208062001)

**ProjectName:** Ross  
**Lab ID:** S1208062-007  
**ClientSample ID:** HBWELL04  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 4:30:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.38	s.u.			Field	08/01/2012 1630
Conductivity	1631	µmhos/cm			Field	08/01/2012 1630
Dissolved Oxygen	1.53	mg/L			Field	08/01/2012 1630
Dissolved Oxygen (pct)	15.1	%			Field	08/01/2012 1630
Turbidity	6.31	NTU			Field	08/01/2012 1630
Temperature	11.2	°C			Field	08/01/2012 1630
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	384	mg/L		5	SM 2320B	08/03/2012 1829 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	469	mg/L		5	SM 2320B	08/03/2012 1829 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/03/2012 1829 KV
Chloride	17	mg/L		1	EPA 300.0	08/03/2012 1811 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/03/2012 1829 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 1006 RH
Sulfate	669	mg/L		1	EPA 300.0	08/03/2012 1811 AMB
Calcium	196	mg/L		1	EPA 200.7	08/03/2012 1655 DG
Magnesium	66	mg/L		1	EPA 200.7	08/03/2012 1655 DG
Potassium	8	mg/L		1	EPA 200.7	08/03/2012 1655 DG
Sodium	142	mg/L		1	EPA 200.7	08/03/2012 1655 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/06/2012 1532 MEL
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	08/03/2012 1829 KV
Electrical Conductivity	1700	µmhos/cm		5	SM 2510B	08/03/2012 1829 KV
Total Dissolved Solids (180)	1430	mg/L		10	SM 2540	08/03/2012 1348 PR
<b>Data Quality</b>						
Cation Sum	21.61	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	22.10	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	1.12	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1330	mg/L		10	SM 1030E	08/10/2012 1146 KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- 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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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1208062-007  
**ClientSample ID:** HBWELL04  
**COC:** 124920 143921 14392

**Date Reported:** 10/2/2012  
**Report ID:** S1208062002  
(Replaces S1208062001)

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 4:30:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1655	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1456	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1456	MS
Boron	ND	mg/L		0.1	EPA 200.7	08/03/2012 1655	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1456	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1655	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1456	MS
Iron	0.50	mg/L		0.05	EPA 200.7	08/03/2012 1655	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1456	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1020	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1456	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1655	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1456	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1456	MS
Uranium	0.0282	mg/L		0.0003	EPA 200.8	08/03/2012 1456	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1456	MS
Zinc	0.06	mg/L		0.01	EPA 200.7	08/03/2012 1655	DG
<b>Metals - Total</b>							
Iron	0.83	mg/L		0.05	EPA 200.7	08/06/2012 1428	DG
Manganese	0.16	mg/L		0.02	EPA 200.7	08/06/2012 1428	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	22.2	pCi/L		4	SM 7110B	08/18/2012 1155	SH
Gross Alpha Precision (±)	4.0	pCi/L			SM 7110B	08/18/2012 1155	SH
Gross Beta	14.8	pCi/L		7	SM 7110B	08/18/2012 1155	SH
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	08/18/2012 1155	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	08/14/2012 1610	SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/24/2012 1021	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/24/2012 1021	AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-002  
**ClientSample ID:** TWO2  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 1:30:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.10	s.u.			Field	08/01/2012 1330
Conductivity	2700	µmhos/cm			Field	08/01/2012 1330
Dissolved Oxygen	1.12	mg/L			Field	08/01/2012 1330
Dissolved Oxygen (pct)	12.2	%			Field	08/01/2012 1330
Turbidity	2.47	NTU			Field	08/01/2012 1330
Temperature	17.3	°C			Field	08/01/2012 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	666	mg/L		5	SM 2320B	08/03/2012 1727 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	770	mg/L		5	SM 2320B	08/03/2012 1727 KV
Alkalinity, Carbonate as CO <sub>3</sub>	20	mg/L		5	SM 2320B	08/03/2012 1727 KV
Chloride	9	mg/L		1	EPA 300.0	08/03/2012 1613 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	08/03/2012 1727 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 954 RH
Sulfate	498	mg/L		1	EPA 300.0	08/03/2012 1613 AMB
Calcium	16	mg/L		1	EPA 200.7	08/03/2012 1630 DG
Magnesium	7	mg/L		1	EPA 200.7	08/03/2012 1630 DG
Potassium	10	mg/L		1	EPA 200.7	08/03/2012 1630 DG
Sodium	538	mg/L		1	EPA 200.7	08/03/2012 1630 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	08/06/2012 1522 MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	08/03/2012 1727 KV
Electrical Conductivity	2100	µmhos/cm		5	SM 2510B	08/03/2012 1727 KV
Total Dissolved Solids (180)	1490	mg/L		10	SM 2540	08/03/2012 1343 PR
<b>Data Quality</b>						
Cation Sum	25.03	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	23.96	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	2.18	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1480	mg/L		10	SM 1030E	08/10/2012 1146 KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-002  
**ClientSample ID:** TWO2  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 1:30:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1630 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1431 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1431 MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/03/2012 1630 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1431 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1630 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1431 MS
Iron	ND	mg/L		0.05	EPA 200.7	08/03/2012 1630 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1431 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1005 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1431 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1630 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1431 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1431 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/03/2012 1431 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1431 MS
Zinc	0.03	mg/L		0.01	EPA 200.7	08/03/2012 1630 DG
<b>Metals - Total</b>						
Iron	0.05	mg/L		0.05	EPA 200.7	08/06/2012 1403 DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/06/2012 1403 DG
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		3	SM 7110B	08/18/2012 1155 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	08/18/2012 1155 SH
Gross Beta	9.1	pCi/L		7	SM 7110B	08/18/2012 1155 SH
Gross Beta Precision (±)	4.3	pCi/L			SM 7110B	08/18/2012 1155 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	08/14/2012 1610 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/22/2012 2054 AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/22/2012 2054 AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-008  
**ClientSample ID:** HBWELL05  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 2:10:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.83	s.u.			Field	08/15/2012 1410
Conductivity	1574	µmhos/cm			Field	08/15/2012 1410
Dissolved Oxygen	3.93	mg/L			Field	08/15/2012 1410
Dissolved Oxygen (pct)	35.5	%			Field	08/15/2012 1410
Turbidity	304	NTU			Field	08/15/2012 1410
Temperature	10.1	°C			Field	08/15/2012 1410
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	542	mg/L		5	SM 2320B	08/17/2012 1819 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	661	mg/L		5	SM 2320B	08/17/2012 1819 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/17/2012 1819 KV
Chloride	5	mg/L		1	EPA 300.0	08/23/2012 048 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/17/2012 1819 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/21/2012 1022 RH
Sulfate	408	mg/L		1	EPA 300.0	08/23/2012 048 AMB
Calcium	76	mg/L		1	EPA 200.7	08/20/2012 1127 DG
Magnesium	34	mg/L		1	EPA 200.7	08/20/2012 1127 DG
Potassium	10	mg/L		1	EPA 200.7	08/20/2012 1127 DG
Sodium	334	mg/L		1	EPA 200.7	08/20/2012 1127 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/23/2012 1104 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	08/17/2012 1819 KV
Electrical Conductivity	1660	µmhos/cm		5	SM 2510B	08/20/2012 1343 KV
Total Dissolved Solids (180)	1220	mg/L		10	SM 2540	08/17/2012 1345 JCG
<b>Data Quality</b>						
Cation Sum	21.33	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Anion Sum	19.49	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Cation-Anion Balance (± 5%)	4.50	%		0.01	SM 1030E	08/28/2012 1200 CJM
Solids, Total Dissolved (Calc)	1190	mg/L		10	SM 1030E	08/28/2012 1200 CJM

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-008  
**ClientSample ID:** HBWELL05  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 2:10:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/20/2012 1127	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/17/2012 1403	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/17/2012 1403	MS
Boron	0.2	mg/L		0.1	EPA 200.7	08/20/2012 1127	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/17/2012 1403	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/20/2012 1127	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/17/2012 1403	MS
Iron	0.59	mg/L		0.05	EPA 200.7	08/20/2012 1127	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/17/2012 1403	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/21/2012 1119	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/17/2012 1403	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/20/2012 1127	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/17/2012 1403	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/17/2012 1403	MS
Uranium	0.0114	mg/L		0.0003	EPA 200.8	08/17/2012 1403	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/17/2012 1403	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/20/2012 1127	DG
<b>Metals - Total</b>							
Iron	91.5	mg/L		0.05	EPA 200.7	08/21/2012 1358	BK
Manganese	0.25	mg/L		0.02	EPA 200.7	08/21/2012 1358	BK
<b>Radionuclides - Dissolved</b>							
Gross Alpha	10.7	pCi/L		2	SM 7110B	09/11/2012 2138	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	09/11/2012 2138	SH
Gross Beta	10.5	pCi/L		4	SM 7110B	09/11/2012 2138	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	09/11/2012 2138	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/05/2012 1225	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/05/2012 1225	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/10/2012 1101	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/10/2012 1101	AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-004  
**ClientSample ID:** ARH02  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 4:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.26	s.u.			Field	09/12/2012 1600
Conductivity	3440	µmhos/cm			Field	09/12/2012 1600
Dissolved Oxygen	1.65	mg/L			Field	09/12/2012 1600
Dissolved Oxygen (pct)	15.7	%			Field	09/12/2012 1600
Turbidity	0.11	NTU			Field	09/12/2012 1600
Temperature	11.7	°C			Field	09/12/2012 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	384	mg/L		5	SM 2320B	09/17/2012 2132 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	459	mg/L		5	SM 2320B	09/17/2012 2132 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	09/17/2012 2132 KV
Chloride	18	mg/L		1	EPA 300.0	09/18/2012 543 AM
Fluoride	0.3	mg/L		0.1	SM 4500FC	09/17/2012 2132 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	09/25/2012 1249 RH
Sulfate	927	mg/L		1	EPA 300.0	09/18/2012 543 AM
Calcium	4	mg/L		1	EPA 200.7	09/14/2012 2053 DG
Magnesium	2	mg/L		1	EPA 200.7	09/14/2012 2053 DG
Potassium	ND	mg/L		1	EPA 200.7	09/14/2012 2053 DG
Sodium	684	mg/L		1	EPA 200.7	09/14/2012 2053 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1342 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	09/17/2012 2132 KV
Electrical Conductivity	2810	µmhos/cm		5	SM 2510B	09/17/2012 2132 KV
Total Dissolved Solids (180)	1920	mg/L		10	SM 2540	09/15/2012 1252 JCG
<b>Data Quality</b>						
Cation Sum	30.10	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	27.50	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	4.50	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	1870	mg/L		10	SM 1030E	09/28/2012 1417 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Lacey Ketron, Water Lab Supervisor

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-004  
**ClientSample ID:** ARH02  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 4:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2053	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/14/2012 2009	MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 2009	MS
Boron	0.2	mg/L		0.1	EPA 200.7	09/14/2012 2053	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 2009	MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2053	DG
Copper	0.02	mg/L		0.01	EPA 200.8	09/17/2012 1524	MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2053	DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 2009	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1241	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 2009	MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2053	DG
Selenium	ND	mg/L		0.005	EPA 200.8	09/14/2012 2009	MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1524	MS
Uranium	0.0316	mg/L		0.0003	EPA 200.8	09/14/2012 2009	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 2009	MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 2053	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1448	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	09/18/2012 1621	DG
Manganese	ND	mg/L		0.02	EPA 200.7	09/18/2012 1621	DG

**These results apply only to the samples tested.**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

**RL - Reporting Limit**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-004  
**ClientSample ID:** ARH02  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/12/2012 4:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	25.2	pCi/L		5	SM 7110B	10/01/2012 000	SH
Gross Alpha Precision (±)	4.8	pCi/L			SM 7110B	10/01/2012 000	SH
Gross Beta	ND	pCi/L		9	SM 7110B	10/01/2012 000	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	10/01/2012 000	SH
Lead 210	1.6	pCi/L		1	OTW01	10/05/2012 1304	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/05/2012 1304	SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1540	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1540	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/02/2012 1110	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/24/2012 756	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/24/2012 756	WN
Thorium 230	ND	pCi/L		0.2	ACW10	09/28/2012 804	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/28/2012 804	MB
Thorium 229 Tracer (30-120)	76.2	%		0.2	ACW10	09/28/2012 804	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	10/11/2012 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 000	SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2012 1516	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 1516	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/05/2012 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/05/2012 813	MB
Thorium 229 Tracer (30-120)	72.1	%		0.2	ACW10	10/05/2012 813	MB

## These results apply only to the samples tested.


## RL - Reporting Limit

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- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-012  
**ClientSample ID:** DWWELL01  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/2/2012 1:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.31	s.u.			Field	08/02/2012 1300
Conductivity	2950	µmhos/cm			Field	08/02/2012 1300
Dissolved Oxygen	1.46	mg/L			Field	08/02/2012 1300
Dissolved Oxygen (pct)	14.5	%			Field	08/02/2012 1300
Turbidity	2.81	NTU			Field	08/02/2012 1300
Temperature	13.0	°C			Field	08/02/2012 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	534	mg/L		5	SM 2320B	08/03/2012 1942 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	621	mg/L		5	SM 2320B	08/03/2012 1942 KV
Alkalinity, Carbonate as CO <sub>3</sub>	15	mg/L		5	SM 2320B	08/03/2012 1942 KV
Chloride	9	mg/L		1	EPA 300.0	08/03/2012 1910 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	08/03/2012 1942 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 1012 RH
Sulfate	741	mg/L		1	EPA 300.0	08/03/2012 1910 AMB
Calcium	24	mg/L		1	EPA 200.7	08/08/2012 1440 MS
Magnesium	12	mg/L		1	EPA 200.7	08/08/2012 1440 MS
Potassium	15	mg/L		1	EPA 200.7	08/08/2012 1440 MS
Sodium	590	mg/L		1	EPA 200.7	08/08/2012 1440 MS
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	08/06/2012 1537 MEL
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	08/03/2012 1942 KV
Electrical Conductivity	2320	µmhos/cm		5	SM 2510B	08/03/2012 1942 KV
Total Dissolved Solids (180)	1670	mg/L		10	SM 2540	08/03/2012 1354 PR
<b>Data Quality</b>						
Cation Sum	28.19	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	26.40	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	3.27	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1710	mg/L		10	SM 1030E	08/10/2012 1146 KO

## These results apply only to the samples tested.

## RL - Reporting Limit

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- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-012  
**ClientSample ID:** DWWELL01  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/2/2012 1:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1707 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1545 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1545 MS
Boron	0.8	mg/L		0.1	EPA 200.7	08/03/2012 1707 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1545 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1707 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1545 MS
Iron	2.41	mg/L		0.05	EPA 200.7	08/03/2012 1707 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1545 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1038 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1545 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1707 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1545 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1545 MS
Uranium	0.0034	mg/L		0.0003	EPA 200.8	08/03/2012 1545 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1545 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/03/2012 1707 DG
<b>Metals - Total</b>						
Iron	2.52	mg/L		0.05	EPA 200.7	08/06/2012 1447 DG
Manganese	0.04	mg/L		0.02	EPA 200.7	08/06/2012 1447 DG
<b>Radionuclides - Dissolved</b>						
Gross Alpha	12.1	pCi/L		3	SM 7110B	08/17/2012 000 SH
Gross Alpha Precision (±)	3.1	pCi/L			SM 7110B	08/17/2012 000 SH
Gross Beta	17.0	pCi/L		7	SM 7110B	08/17/2012 000 SH
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	08/17/2012 000 SH
Radium 226	1.6	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610 SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	08/14/2012 1610 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/29/2012 638 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/29/2012 638 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-004  
**ClientSample ID:** 19XX18  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 2:40:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.69	s.u.			Field	08/01/2012 1440
Conductivity	3110	µmhos/cm			Field	08/01/2012 1440
Dissolved Oxygen	2.95	mg/L			Field	08/01/2012 1440
Dissolved Oxygen (pct)	30.2	%			Field	08/01/2012 1440
Turbidity	0.50	NTU			Field	08/01/2012 1440
Temperature	14.5	°C			Field	08/01/2012 1440
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	590	mg/L		5	SM 2320B	08/03/2012 1753 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	674	mg/L		5	SM 2320B	08/03/2012 1753 KV
Alkalinity, Carbonate as CO <sub>3</sub>	22	mg/L		5	SM 2320B	08/03/2012 1753 KV
Chloride	9	mg/L		1	EPA 300.0	08/03/2012 1736 AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	08/03/2012 1753 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 957 RH
Sulfate	731	mg/L		1	EPA 300.0	08/03/2012 1736 AMB
Calcium	9	mg/L		1	EPA 200.7	08/03/2012 1634 DG
Magnesium	3	mg/L		1	EPA 200.7	08/03/2012 1634 DG
Potassium	4	mg/L		1	EPA 200.7	08/03/2012 1634 DG
Sodium	585	mg/L		1	EPA 200.7	08/03/2012 1634 DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	08/06/2012 1529 MEL
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	08/03/2012 1753 KV
Electrical Conductivity	2390	µmhos/cm		5	SM 2510B	08/03/2012 1753 KV
Total Dissolved Solids (180)	1700	mg/L		10	SM 2540	08/03/2012 1345 PR
<b>Data Quality</b>						
Cation Sum	26.23	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	27.31	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	2.00	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1700	mg/L		10	SM 1030E	08/10/2012 1146 KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-004  
**ClientSample ID:** 19XX18  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 2:40:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1634	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1441	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1441	MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/03/2012 1634	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1441	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1634	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1441	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/03/2012 1634	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1441	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1014	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1441	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1634	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1441	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1441	MS
Uranium	0.0691	mg/L		0.0003	EPA 200.8	08/03/2012 1441	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1441	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/03/2012 1634	DG
<b>Metals - Total</b>							
Iron	0.07	mg/L		0.05	EPA 200.7	08/06/2012 1414	DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/06/2012 1414	DG
<b>Radionuclides - Dissolved</b>							
Gross Alpha	189	pCi/L		5	SM 7110B	08/18/2012 1155	SH
Gross Alpha Precision (±)	11	pCi/L			SM 7110B	08/18/2012 1155	SH
Gross Beta	50.0	pCi/L		8	SM 7110B	08/18/2012 1155	SH
Gross Beta Precision (±)	5.7	pCi/L			SM 7110B	08/18/2012 1155	SH
Radium 226	43.1	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610	SH
Radium 226 Precision (±)	0.9	pCi/L			SM 7500 Ra-B	08/14/2012 1610	SH
Radium 228	2.19	pCi/L		1	Ga-Tech	08/23/2012 1301	AA
Radium 228 Precision (±)	0.98	pCi/L			Ga-Tech	08/23/2012 1301	AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-005  
**ClientSample ID:** 22X-19  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 3:15:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.95	s.u.			Field	08/01/2012 1515
Conductivity	1822	µmhos/cm			Field	08/01/2012 1515
Dissolved Oxygen	1.25	mg/L			Field	08/01/2012 1515
Dissolved Oxygen (pct)	12.3	%			Field	08/01/2012 1515
Turbidity	0.24	NTU			Field	08/01/2012 1515
Temperature	13.3	°C			Field	08/01/2012 1515
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	474	mg/L		5	SM 2320B	08/03/2012 1806 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	528	mg/L		5	SM 2320B	08/03/2012 1806 KV
Alkalinity, Carbonate as CO <sub>3</sub>	25	mg/L		5	SM 2320B	08/03/2012 1806 KV
Chloride	14	mg/L		1	EPA 300.0	08/03/2012 1748 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	08/03/2012 1806 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 958 RH
Sulfate	589	mg/L		1	EPA 300.0	08/03/2012 1748 AMB
Calcium	6	mg/L		1	EPA 200.7	08/03/2012 1637 DG
Magnesium	2	mg/L		1	EPA 200.7	08/03/2012 1637 DG
Potassium	4	mg/L		1	EPA 200.7	08/03/2012 1637 DG
Sodium	517	mg/L		1	EPA 200.7	08/03/2012 1637 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	08/06/2012 1530 MEL
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	08/03/2012 1806 KV
Electrical Conductivity	2080	µmhos/cm		5	SM 2510B	08/03/2012 1806 KV
Total Dissolved Solids (180)	1410	mg/L		10	SM 2540	08/03/2012 1346 PR
<b>Data Quality</b>						
Cation Sum	23.06	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	22.16	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	1.99	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1420	mg/L		10	SM 1030E	08/10/2012 1146 KO

These results apply only to the samples tested.

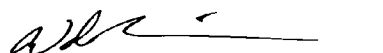
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-005  
**ClientSample ID:** 22X-19  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 3:15:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1637 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1446 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1446 MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/03/2012 1637 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1446 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1637 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1446 MS
Iron	ND	mg/L		0.05	EPA 200.7	08/03/2012 1637 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1446 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1016 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1446 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1637 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1446 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1446 MS
Uranium	0.0174	mg/L		0.0003	EPA 200.8	08/03/2012 1446 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1446 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/03/2012 1637 DG

## Metals - Total

Iron	0.08	mg/L		0.05	EPA 200.7	08/06/2012 1416 DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/06/2012 1416 DG

## Radionuclides - Dissolved

Gross Alpha	40.0	pCi/L		5	SM 7110B	08/18/2012 1155 SH
Gross Alpha Precision (±)	5.5	pCi/L			SM 7110B	08/18/2012 1155 SH
Gross Beta	9.0	pCi/L		8	SM 7110B	08/18/2012 1155 SH
Gross Beta Precision (±)	4.6	pCi/L			SM 7110B	08/18/2012 1155 SH
Radium 226	2.9	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610 SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	08/14/2012 1610 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/23/2012 1618 AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/23/2012 1618 AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-010  
**ClientSample ID:** CSWELL01  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/2/2012 11:30:00 AM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.05	s.u.			Field	08/02/2012 1130
Conductivity	2700	µmhos/cm			Field	08/02/2012 1130
Dissolved Oxygen	1.18	mg/L			Field	08/02/2012 1130
Dissolved Oxygen (pct)	12.4	%			Field	08/02/2012 1130
Turbidity	0.56	NTU			Field	08/02/2012 1130
Temperature	16.1	°C			Field	08/02/2012 1130
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	563	mg/L		5	SM 2320B	08/03/2012 1917 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	661	mg/L		5	SM 2320B	08/03/2012 1917 KV
Alkalinity, Carbonate as CO <sub>3</sub>	13	mg/L		5	SM 2320B	08/03/2012 1917 KV
Chloride	9	mg/L		1	EPA 300.0	08/03/2012 1847 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	08/03/2012 1917 KV
Nitrogen, Nitrate-Nitrite (as N)	0.3	mg/L		0.1	EPA 353.2	08/03/2012 1009 RH
Sulfate	663	mg/L		1	EPA 300.0	08/03/2012 1847 AMB
Calcium	40	mg/L		1	EPA 200.7	08/03/2012 1702 DG
Magnesium	28	mg/L		1	EPA 200.7	08/03/2012 1702 DG
Potassium	12	mg/L		1	EPA 200.7	08/03/2012 1702 DG
Sodium	494	mg/L		1	EPA 200.7	08/03/2012 1702 DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	08/06/2012 1535 MEL
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	08/03/2012 1917 KV
Electrical Conductivity	2180	µmhos/cm		5	SM 2510B	08/03/2012 1917 KV
Total Dissolved Solids (180)	1570	mg/L		10	SM 2540	08/03/2012 1351 PR
<b>Data Quality</b>						
Cation Sum	26.09	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	25.34	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	1.47	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	1580	mg/L		10	SM 1030E	08/10/2012 1146 KO

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-010  
**ClientSample ID:** CSWELL01  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/2/2012 11:30:00 AM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1702 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1535 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1535 MS
Boron	0.4	mg/L		0.1	EPA 200.7	08/03/2012 1702 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1535 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1702 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1535 MS
Iron	ND	mg/L		0.05	EPA 200.7	08/03/2012 1702 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1535 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1029 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1535 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1702 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1535 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1535 MS
Uranium	0.0089	mg/L		0.0003	EPA 200.8	08/03/2012 1535 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1535 MS
Zinc	0.01	mg/L		0.01	EPA 200.7	08/03/2012 1702 DG
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	08/06/2012 1442 DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/06/2012 1442 DG
<b>Radionuclides - Dissolved</b>						
Gross Alpha	13.4	pCi/L		4	SM 7110B	08/17/2012 000 SH
Gross Alpha Precision (±)	3.6	pCi/L			SM 7110B	08/17/2012 000 SH
Gross Beta	11.0	pCi/L		7	SM 7110B	08/17/2012 000 SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	08/17/2012 000 SH
Radium 226	0.6	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	08/14/2012 1610 SH
Radium 228	1.69	pCi/L		1	Ga-Tech	08/24/2012 2031 AA
Radium 228 Precision (±)	0.89	pCi/L			Ga-Tech	08/24/2012 2031 AA

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-011  
**ClientSample ID:** CSWELL03  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/2/2012 12:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.92	s.u.			Field	08/02/2012 1200
Conductivity	640	µmhos/cm			Field	08/02/2012 1200
Dissolved Oxygen	1.42	mg/L			Field	08/02/2012 1200
Dissolved Oxygen (pct)	13.8	%			Field	08/02/2012 1200
Turbidity	3.53	NTU			Field	08/02/2012 1200
Temperature	11.6	°C			Field	08/02/2012 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	321	mg/L		5	SM 2320B	08/03/2012 1929 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	383	mg/L		5	SM 2320B	08/03/2012 1929 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/03/2012 1929 KV
Chloride	4	mg/L		1	EPA 300.0	08/03/2012 1859 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/03/2012 1929 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 1011 RH
Sulfate	31	mg/L		1	EPA 300.0	08/03/2012 1859 AMB
Calcium	45	mg/L		1	EPA 200.7	08/03/2012 1705 DG
Magnesium	24	mg/L		1	EPA 200.7	08/03/2012 1705 DG
Potassium	10	mg/L		1	EPA 200.7	08/03/2012 1705 DG
Sodium	66	mg/L		1	EPA 200.7	08/03/2012 1705 DG
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	08/06/2012 1536 MEL
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	08/03/2012 1929 KV
Electrical Conductivity	626	µmhos/cm		5	SM 2510B	08/03/2012 1929 KV
Total Dissolved Solids (180)	360	mg/L		10	SM 2540	08/03/2012 1353 PR
<b>Data Quality</b>						
Cation Sum	7.36	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	7.17	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	1.28	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	370	mg/L		10	SM 1030E	08/10/2012 1146 KO

These results apply only to the samples tested.


## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/10/2012  
**Report ID:** S1208062001

**ProjectName:** Ross  
**Lab ID:** S1208062-011  
**ClientSample ID:** CSWELL03  
**COC:** 124920 143921 14392

**WorkOrder:** S1208062  
**CollectionDate:** 8/2/2012 12:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1705 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1540 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1540 MS
Boron	ND	mg/L		0.1	EPA 200.7	08/03/2012 1705 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1540 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1705 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1540 MS
Iron	3.29	mg/L		0.05	EPA 200.7	08/03/2012 1705 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1540 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1036 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1540 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1705 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1540 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1540 MS
Uranium	0.0007	mg/L		0.0003	EPA 200.8	08/03/2012 1540 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1540 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/03/2012 1705 DG
<b>Metals - Total</b>						
Iron	3.76	mg/L		0.05	EPA 200.7	08/06/2012 1444 DG
Manganese	0.20	mg/L		0.02	EPA 200.7	08/06/2012 1444 DG
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	08/17/2012 000 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	08/17/2012 000 SH
Gross Beta	8.0	pCi/L		3	SM 7110B	08/17/2012 000 SH
Gross Beta Precision (±)	1.2	pCi/L			SM 7110B	08/17/2012 000 SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	08/14/2012 1610 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/29/2012 337 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/29/2012 337 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-004  
**ClientSample ID:** P17177W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 12:00:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.15	s.u.			Field	08/15/2012 1200
Conductivity	795	µmhos/cm			Field	08/15/2012 1200
Dissolved Oxygen	1.51	mg/L			Field	08/15/2012 1200
Dissolved Oxygen (pct)	13.8	%			Field	08/15/2012 1200
Turbidity	0.00	NTU			Field	08/15/2012 1200
Temperature	9.9	°C			Field	08/15/2012 1200
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	373	mg/L		5	SM 2320B	08/17/2012 1728 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	438	mg/L		5	SM 2320B	08/17/2012 1728 KV
Alkalinity, Carbonate as CO <sub>3</sub>	8	mg/L		5	SM 2320B	08/17/2012 1728 KV
Chloride	9	mg/L		1	EPA 300.0	08/23/2012 003 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/17/2012 1728 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/21/2012 1012 RH
Sulfate	61	mg/L		1	EPA 300.0	08/23/2012 003 AMB
Calcium	33	mg/L		1	EPA 200.7	08/20/2012 1117 DG
Magnesium	10	mg/L		1	EPA 200.7	08/20/2012 1117 DG
Potassium	5	mg/L		1	EPA 200.7	08/20/2012 1117 DG
Sodium	154	mg/L		1	EPA 200.7	08/20/2012 1117 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/23/2012 1100 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	08/17/2012 1728 KV
Electrical Conductivity	801	µmhos/cm		5	SM 2510B	08/20/2012 1333 KV
Total Dissolved Solids (180)	500	mg/L		10	SM 2540	08/17/2012 1341 JCG
<b>Data Quality</b>						
Cation Sum	9.24	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Anion Sum	9.00	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Cation-Anion Balance (± 5%)	1.33	%		0.01	SM 1030E	08/28/2012 1200 CJM
Solids, Total Dissolved (Calc)	500	mg/L		10	SM 1030E	08/28/2012 1200 CJM

These results apply only to the samples tested.

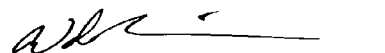
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-004  
**ClientSample ID:** P17177W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 12:00:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/20/2012 1117	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/17/2012 1343	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/17/2012 1343	MS
Boron	ND	mg/L		0.1	EPA 200.7	08/20/2012 1117	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/17/2012 1343	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/20/2012 1117	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/17/2012 1343	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/20/2012 1117	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/17/2012 1343	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/21/2012 1112	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/17/2012 1343	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/20/2012 1117	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/17/2012 1343	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/17/2012 1343	MS
Uranium	0.0135	mg/L		0.0003	EPA 200.8	08/17/2012 1343	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/17/2012 1343	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/20/2012 1117	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	08/21/2012 1338	BK
Manganese	ND	mg/L		0.02	EPA 200.7	08/21/2012 1338	BK
<b>Radionuclides - Dissolved</b>							
Gross Alpha	7.1	pCi/L		2	SM 7110B	09/10/2012 2153	SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	09/10/2012 2153	SH
Gross Beta	7.3	pCi/L		3	SM 7110B	09/10/2012 2153	SH
Gross Beta Precision (±)	1.5	pCi/L			SM 7110B	09/10/2012 2153	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/05/2012 1225	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/05/2012 1225	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/09/2012 2257	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/09/2012 2257	AA

These results apply only to the samples tested.

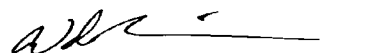
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-006  
**ClientSample ID:** SBWELL02  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 1:00:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.80	s.u.			Field	08/15/2012 1300
Conductivity	685	µmhos/cm			Field	08/15/2012 1300
Dissolved Oxygen	1.67	mg/L			Field	08/15/2012 1300
Dissolved Oxygen (pct)	15.1	%			Field	08/15/2012 1300
Turbidity	0.71	NTU			Field	08/15/2012 1300
Temperature	9.5	°C			Field	08/15/2012 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	380	mg/L		5	SM 2320B	08/17/2012 1754 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	464	mg/L		5	SM 2320B	08/17/2012 1754 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/17/2012 1754 KV
Chloride	1	mg/L		1	EPA 300.0	08/23/2012 026 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	08/17/2012 1754 KV
Nitrogen, Nitrate-Nitrite (as N)	0.3	mg/L		0.1	EPA 353.2	08/21/2012 1014 RH
Sulfate	35	mg/L		1	EPA 300.0	08/23/2012 026 AMB
Calcium	42	mg/L		1	EPA 200.7	08/27/2012 1242 BK
Magnesium	27	mg/L		1	EPA 200.7	08/27/2012 1242 BK
Potassium	17	mg/L		1	EPA 200.7	08/27/2012 1242 BK
Sodium	80	mg/L		1	EPA 200.7	08/27/2012 1242 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/23/2012 1102 RH
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	08/17/2012 1754 KV
Electrical Conductivity	730	µmhos/cm		5	SM 2510B	08/20/2012 1339 KV
Total Dissolved Solids (180)	420	mg/L		10	SM 2540	08/17/2012 1343 JCG
<b>Data Quality</b>						
Cation Sum	8.26	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Anion Sum	8.38	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Cation-Anion Balance (± 5%)	0.73	%		0.01	SM 1030E	08/28/2012 1200 CJM
Solids, Total Dissolved (Calc)	430	mg/L		10	SM 1030E	08/28/2012 1200 CJM

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-006  
**ClientSample ID:** SBWELL02  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 1:00:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/20/2012 1122	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/17/2012 1353	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/17/2012 1353	MS
Boron	ND	mg/L		0.1	EPA 200.7	08/20/2012 1122	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/17/2012 1353	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/20/2012 1122	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/17/2012 1353	MS
Iron	0.16	mg/L		0.05	EPA 200.7	08/20/2012 1122	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/17/2012 1353	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/21/2012 1115	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/17/2012 1353	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/20/2012 1122	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/17/2012 1353	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/17/2012 1353	MS
Uranium	0.0080	mg/L		0.0003	EPA 200.8	08/17/2012 1353	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/17/2012 1353	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/20/2012 1122	DG
<b>Metals - Total</b>							
Iron	0.70	mg/L		0.05	EPA 200.7	08/21/2012 1349	BK
Manganese	0.16	mg/L		0.02	EPA 200.7	08/21/2012 1349	BK
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.2	pCi/L		2	SM 7110B	09/10/2012 2153	SH
Gross Alpha Precision (±)	1.0	pCi/L			SM 7110B	09/10/2012 2153	SH
Gross Beta	14.3	pCi/L		3	SM 7110B	09/10/2012 2153	SH
Gross Beta Precision (±)	1.7	pCi/L			SM 7110B	09/10/2012 2153	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	09/05/2012 1225	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/05/2012 1225	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/10/2012 459	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/10/2012 459	AA

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-001  
**ClientSample ID:** P84665W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 10:00:00 AM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.49	s.u.			Field	08/15/2012 1000
Conductivity	936	µmhos/cm			Field	08/15/2012 1000
Dissolved Oxygen	2.90	mg/L			Field	08/15/2012 1000
Dissolved Oxygen (pct)	26.1	%			Field	08/15/2012 1000
Turbidity	0.79	NTU			Field	08/15/2012 1000
Temperature	9.5	°C			Field	08/15/2012 1000
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	475	mg/L		5	SM 2320B	08/17/2012 1649 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	579	mg/L		5	SM 2320B	08/17/2012 1649 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/17/2012 1649 KV
Chloride	15	mg/L		1	EPA 300.0	08/22/2012 2329 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	08/17/2012 1649 KV
Nitrogen, Nitrate-Nitrite (as N)	1.5	mg/L		0.1	EPA 353.2	08/21/2012 1008 RH
Sulfate	105	mg/L		1	EPA 300.0	08/22/2012 2329 AMB
Calcium	89	mg/L		1	EPA 200.7	08/20/2012 1056 DG
Magnesium	42	mg/L		1	EPA 200.7	08/20/2012 1056 DG
Potassium	8	mg/L		1	EPA 200.7	08/20/2012 1056 DG
Sodium	98	mg/L		1	EPA 200.7	08/20/2012 1056 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/23/2012 1052 RH
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	08/17/2012 1649 KV
Electrical Conductivity	1050	µmhos/cm		5	SM 2510B	08/20/2012 1327 KV
Total Dissolved Solids (180)	500	mg/L		10	SM 2540	08/17/2012 1337 JCG
<b>Data Quality</b>						
Cation Sum	12.31	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Anion Sum	12.19	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Cation-Anion Balance (± 5%)	0.49	%		0.01	SM 1030E	08/28/2012 1200 CJM
Solids, Total Dissolved (Calc)	650	mg/L		10	SM 1030E	08/28/2012 1200 CJM

## These results apply only to the samples tested.

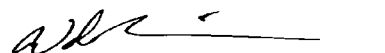
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-001  
**ClientSample ID:** P84665W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 10:00:00 AM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/20/2012 1056 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/17/2012 1304 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/17/2012 1304 MS
Boron	ND	mg/L		0.1	EPA 200.7	08/20/2012 1056 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/17/2012 1304 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/20/2012 1056 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/17/2012 1304 MS
Iron	0.05	mg/L		0.05	EPA 200.7	08/20/2012 1056 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/17/2012 1304 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/21/2012 1106 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/17/2012 1304 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/20/2012 1056 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/17/2012 1304 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/17/2012 1304 MS
Uranium	0.0626	mg/L		0.0003	EPA 200.8	08/17/2012 1304 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/17/2012 1304 MS
Zinc	0.02	mg/L		0.01	EPA 200.7	08/20/2012 1056 DG
<b>Metals - Total</b>						
Iron	0.13	mg/L		0.05	EPA 200.7	08/21/2012 1319 BK
Manganese	ND	mg/L		0.02	EPA 200.7	08/21/2012 1319 BK
<b>Radionuclides - Dissolved</b>						
Gross Alpha	31.5	pCi/L		2	SM 7110B	09/10/2012 2153 SH
Gross Alpha Precision (±)	3.1	pCi/L			SM 7110B	09/10/2012 2153 SH
Gross Beta	15.6	pCi/L		3	SM 7110B	09/10/2012 2153 SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	09/10/2012 2153 SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	09/05/2012 1225 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/05/2012 1225 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/09/2012 1354 AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/09/2012 1354 AA

## These results apply only to the samples tested.

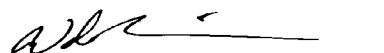
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-002  
**ClientSample ID:** P50113W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 10:50:00 AM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.49	s.u.			Field	08/15/2012 1050
Conductivity	1387	µmhos/cm			Field	08/15/2012 1050
Dissolved Oxygen	2.46	mg/L			Field	08/15/2012 1050
Dissolved Oxygen (pct)	23.0	%			Field	08/15/2012 1050
Turbidity	0.01	NTU			Field	08/15/2012 1050
Temperature	9.0	°C			Field	08/15/2012 1050
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	555	mg/L		5	SM 2320B	08/17/2012 1701 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	677	mg/L		5	SM 2320B	08/17/2012 1701 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/17/2012 1701 KV
Chloride	43	mg/L		1	EPA 300.0	08/22/2012 2340 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/17/2012 1701 KV
Nitrogen, Nitrate-Nitrite (as N)	17.4	mg/L		0.1	EPA 353.2	08/21/2012 1410 RH
Sulfate	161	mg/L		1	EPA 300.0	08/22/2012 2340 AMB
Calcium	98	mg/L		1	EPA 200.7	08/20/2012 1059 DG
Magnesium	56	mg/L		1	EPA 200.7	08/20/2012 1059 DG
Potassium	7	mg/L		1	EPA 200.7	08/20/2012 1059 DG
Sodium	180	mg/L		1	EPA 200.7	08/20/2012 1059 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/23/2012 1058 RH
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	08/17/2012 1701 KV
Electrical Conductivity	1490	µmhos/cm		5	SM 2510B	08/20/2012 1329 KV
Total Dissolved Solids (180)	1000	mg/L		10	SM 2540	08/17/2012 1339 JCG
<b>Data Quality</b>						
Cation Sum	17.48	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Anion Sum	16.92	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Cation-Anion Balance (± 5%)	1.62	%		0.01	SM 1030E	08/28/2012 1200 CJM
Solids, Total Dissolved (Calc)	960	mg/L		10	SM 1030E	08/28/2012 1200 CJM

These results apply only to the samples tested.

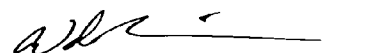
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-002  
**ClientSample ID:** P50113W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 10:50:00 AM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/20/2012 1059	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/17/2012 1323	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/17/2012 1323	MS
Boron	ND	mg/L		0.1	EPA 200.7	08/20/2012 1059	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/17/2012 1323	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/20/2012 1059	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/17/2012 1323	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/20/2012 1059	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/17/2012 1323	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/21/2012 1108	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/17/2012 1323	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/20/2012 1059	DG
Selenium	0.026	mg/L		0.005	EPA 200.8	08/17/2012 1323	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/17/2012 1323	MS
Uranium	0.178	mg/L		0.0003	EPA 200.8	08/17/2012 1323	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/17/2012 1323	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/20/2012 1059	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	08/21/2012 1333	BK
Manganese	0.37	mg/L		0.02	EPA 200.7	08/21/2012 1333	BK
<b>Radionuclides - Dissolved</b>							
Gross Alpha	73.8	pCi/L		2	SM 7110B	09/10/2012 2153	SH
Gross Alpha Precision (±)	5.2	pCi/L			SM 7110B	09/10/2012 2153	SH
Gross Beta	49.2	pCi/L		5	SM 7110B	09/10/2012 2153	SH
Gross Beta Precision (±)	3.6	pCi/L			SM 7110B	09/10/2012 2153	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	09/05/2012 1225	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/05/2012 1225	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/09/2012 1655	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/09/2012 1655	AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-003  
**ClientSample ID:** SBWELL01  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 11:15:00 AM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.08	s.u.			Field	08/15/2012 1115
Conductivity	1148	µmhos/cm			Field	08/15/2012 1115
Dissolved Oxygen	1.56	mg/L			Field	08/15/2012 1115
Dissolved Oxygen (pct)	15.0	%			Field	08/15/2012 1115
Turbidity	0.15	NTU			Field	08/15/2012 1115
Temperature	12.6	°C			Field	08/15/2012 1115
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	544	mg/L		5	SM 2320B	08/17/2012 1715 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	604	mg/L		5	SM 2320B	08/17/2012 1715 KV
Alkalinity, Carbonate as CO <sub>3</sub>	30	mg/L		5	SM 2320B	08/17/2012 1715 KV
Chloride	2	mg/L		1	EPA 300.0	08/22/2012 2352 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	08/17/2012 1715 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/21/2012 1319 RH
Sulfate	98	mg/L		1	EPA 300.0	08/22/2012 2352 AMB
Calcium	2	mg/L		1	EPA 200.7	08/20/2012 1103 DG
Magnesium	1	mg/L		1	EPA 200.7	08/20/2012 1103 DG
Potassium	3	mg/L		1	EPA 200.7	08/20/2012 1103 DG
Sodium	310	mg/L		1	EPA 200.7	08/20/2012 1103 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/23/2012 1059 RH
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	08/17/2012 1715 KV
Electrical Conductivity	1150	µmhos/cm		5	SM 2510B	08/20/2012 1331 KV
Total Dissolved Solids (180)	730	mg/L		10	SM 2540	08/17/2012 1340 JCG
<b>Data Quality</b>						
Cation Sum	13.74	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Anion Sum	12.97	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Cation-Anion Balance (± 5%)	2.87	%		0.01	SM 1030E	08/28/2012 1200 CJM
Solids, Total Dissolved (Calc)	740	mg/L		10	SM 1030E	08/28/2012 1200 CJM

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-003  
**ClientSample ID:** SBWELL01  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 11:15:00 AM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/20/2012 1103	DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	08/17/2012 1328	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/17/2012 1328	MS
Boron	0.1	mg/L		0.1	EPA 200.7	08/20/2012 1103	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/17/2012 1328	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/20/2012 1103	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/17/2012 1328	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/20/2012 1103	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/17/2012 1328	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/21/2012 1110	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/17/2012 1328	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/20/2012 1103	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/17/2012 1328	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/17/2012 1328	MS
Uranium	0.0013	mg/L		0.0003	EPA 200.8	08/17/2012 1328	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/17/2012 1328	MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/20/2012 1103	DG
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	08/21/2012 1335	BK
Manganese	ND	mg/L		0.02	EPA 200.7	08/21/2012 1335	BK
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.3	pCi/L		2	SM 7110B	09/10/2012 2153	SH
Gross Alpha Precision (±)	1.2	pCi/L			SM 7110B	09/10/2012 2153	SH
Gross Beta	5.3	pCi/L		3	SM 7110B	09/10/2012 2153	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	09/10/2012 2153	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/05/2012 1225	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/05/2012 1225	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/09/2012 1956	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/09/2012 1956	AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-007  
**ClientSample ID:** P71108W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 1:30:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.48	s.u.			Field	08/15/2012 1330
Conductivity	1597	µmhos/cm			Field	08/15/2012 1330
Dissolved Oxygen	1.39	mg/L			Field	08/15/2012 1330
Dissolved Oxygen (pct)	13.0	%			Field	08/15/2012 1330
Turbidity	0.00	NTU			Field	08/15/2012 1330
Temperature	11.6	°C			Field	08/15/2012 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	602	mg/L		5	SM 2320B	08/17/2012 1807 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	735	mg/L		5	SM 2320B	08/17/2012 1807 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	08/17/2012 1807 KV
Chloride	8	mg/L		1	EPA 300.0	08/23/2012 037 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	08/17/2012 1807 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/21/2012 1021 RH
Sulfate	480	mg/L		1	EPA 300.0	08/23/2012 037 AMB
Calcium	63	mg/L		1	EPA 200.7	08/20/2012 1125 DG
Magnesium	68	mg/L		1	EPA 200.7	08/20/2012 1125 DG
Potassium	9	mg/L		1	EPA 200.7	08/20/2012 1125 DG
Sodium	310	mg/L		1	EPA 200.7	08/20/2012 1125 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/23/2012 1103 RH
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	08/17/2012 1807 KV
Electrical Conductivity	1860	µmhos/cm		5	SM 2510B	08/20/2012 1341 KV
Total Dissolved Solids (180)	1350	mg/L		10	SM 2540	08/17/2012 1344 JCG
<b>Data Quality</b>						
Cation Sum	22.46	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Anion Sum	22.27	meq/L		0.01	SM 1030E	08/28/2012 1200 CJM
Cation-Anion Balance (± 5%)	0.40	%		0.01	SM 1030E	08/28/2012 1200 CJM
Solids, Total Dissolved (Calc)	1300	mg/L		10	SM 1030E	08/28/2012 1200 CJM

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 9/18/2012  
**Report ID:** S1208307001

**ProjectName:** Ross  
**Lab ID:** S1208307-007  
**ClientSample ID:** P71108W  
**COC:** 143923 143924

**WorkOrder:** S1208307  
**CollectionDate:** 8/15/2012 1:30:00 PM  
**DateReceived:** 8/17/2012 3:59:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	08/20/2012 1125	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/17/2012 1358	MS
Barium	ND	mg/L		0.5	EPA 200.8	08/17/2012 1358	MS
Boron	0.1	mg/L		0.1	EPA 200.7	08/20/2012 1125	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/17/2012 1358	MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/20/2012 1125	DG
Copper	ND	mg/L		0.01	EPA 200.8	08/17/2012 1358	MS
Iron	ND	mg/L		0.05	EPA 200.7	08/20/2012 1125	DG
Lead	ND	mg/L		0.02	EPA 200.8	08/17/2012 1358	MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/21/2012 1117	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/17/2012 1358	MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/20/2012 1125	DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/17/2012 1358	MS
Silver	ND	mg/L		0.003	EPA 200.8	08/17/2012 1358	MS
Uranium	0.0695	mg/L		0.0003	EPA 200.8	08/17/2012 1358	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/17/2012 1358	MS
Zinc	0.04	mg/L		0.01	EPA 200.7	08/20/2012 1125	DG
<b>Metals - Total</b>							
Iron	0.12	mg/L		0.05	EPA 200.7	08/21/2012 1355	BK
Manganese	0.28	mg/L		0.02	EPA 200.7	08/21/2012 1355	BK
<b>Radionuclides - Dissolved</b>							
Gross Alpha	55.5	pCi/L		3	SM 7110B	09/11/2012 2138	SH
Gross Alpha Precision (±)	5.6	pCi/L			SM 7110B	09/11/2012 2138	SH
Gross Beta	33.3	pCi/L		7	SM 7110B	09/11/2012 2138	SH
Gross Beta Precision (±)	4.6	pCi/L			SM 7110B	09/11/2012 2138	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	09/05/2012 1225	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	09/05/2012 1225	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/10/2012 800	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/10/2012 800	AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1208062-003  
**ClientSample ID:** TWWELL03  
**COC:** 124920 143921 14392

**Date Reported:** 10/2/2012  
**Report ID:** S1208062002  
(Replaces S1208062001)

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 2:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.99	s.u.			Field	08/01/2012 1400
Conductivity	1448	µmhos/cm			Field	08/01/2012 1400
Dissolved Oxygen	2.94	mg/L			Field	08/01/2012 1400
Dissolved Oxygen (pct)	28.3	%			Field	08/01/2012 1400
Turbidity	0.15	NTU			Field	08/01/2012 1400
Temperature	11.9	°C			Field	08/01/2012 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	587	mg/L		5	SM 2320B	08/03/2012 1740 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	655	mg/L		5	SM 2320B	08/03/2012 1740 KV
Alkalinity, Carbonate as CO <sub>3</sub>	30	mg/L		5	SM 2320B	08/03/2012 1740 KV
Chloride	3	mg/L		1	EPA 300.0	08/03/2012 1625 AMB
Fluoride	1.3	mg/L		0.1	SM 4500FC	08/03/2012 1740 KV
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	08/03/2012 955 RH
Sulfate	214	mg/L		1	EPA 300.0	08/03/2012 1625 AMB
Calcium	3	mg/L		1	EPA 200.7	08/03/2012 1632 DG
Magnesium	2	mg/L		1	EPA 200.7	08/03/2012 1632 DG
Potassium	3	mg/L		1	EPA 200.7	08/03/2012 1632 DG
Sodium	379	mg/L		1	EPA 200.7	08/03/2012 1632 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	08/06/2012 1523 MEL
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	08/03/2012 1740 KV
Electrical Conductivity	1490	µmhos/cm		5	SM 2510B	08/03/2012 1740 KV
Total Dissolved Solids (180)	980	mg/L		10	SM 2540	08/03/2012 1344 PR
<b>Data Quality</b>						
Cation Sum	16.85	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Anion Sum	16.34	meq/L		0.01	SM 1030E	08/10/2012 1146 KO
Cation-Anion Balance (± 5%)	1.54	%		0.01	SM 1030E	08/10/2012 1146 KO
Solids, Total Dissolved (Calc)	960	mg/L		10	SM 1030E	08/10/2012 1146 KO

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Ross  
**Lab ID:** S1208062-003  
**ClientSample ID:** TWWELL03  
**COC:** 124920 143921 14392

**Date Reported:** 10/2/2012  
**Report ID:** S1208062002  
(Replaces S1208062001)

**WorkOrder:** S1208062  
**CollectionDate:** 8/1/2012 2:00:00 PM  
**DateReceived:** 8/3/2012 7:25:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	08/03/2012 1632 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	08/03/2012 1436 MS
Barium	ND	mg/L		0.5	EPA 200.8	08/03/2012 1436 MS
Boron	0.5	mg/L		0.1	EPA 200.7	08/03/2012 1632 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	08/03/2012 1436 MS
Chromium	ND	mg/L		0.01	EPA 200.7	08/03/2012 1632 DG
Copper	ND	mg/L		0.01	EPA 200.8	08/03/2012 1436 MS
Iron	ND	mg/L		0.05	EPA 200.7	08/03/2012 1632 DG
Lead	ND	mg/L		0.02	EPA 200.8	08/03/2012 1436 MS
Mercury	ND	mg/L		0.001	EPA 245.1	08/07/2012 1012 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	08/03/2012 1436 MS
Nickel	ND	mg/L		0.01	EPA 200.7	08/03/2012 1632 DG
Selenium	ND	mg/L		0.005	EPA 200.8	08/03/2012 1436 MS
Silver	ND	mg/L		0.003	EPA 200.8	08/03/2012 1436 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	08/03/2012 1436 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	08/03/2012 1436 MS
Zinc	ND	mg/L		0.01	EPA 200.7	08/03/2012 1632 DG
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	08/06/2012 1412 DG
Manganese	ND	mg/L		0.02	EPA 200.7	08/06/2012 1412 DG
<b>Radionuclides - Dissolved</b>						
Gross Alpha	2.1	pCi/L		2	SM 7110B	08/18/2012 1155 SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	08/18/2012 1155 SH
Gross Beta	ND	pCi/L		5	SM 7110B	08/18/2012 1155 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	08/18/2012 1155 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	08/14/2012 1610 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	08/14/2012 1610 SH
Radium 228	ND	pCi/L		1	Ga-Tech	08/23/2012 909 AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	08/23/2012 909 AA

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-005  
**ClientSample ID:** P42868W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 9:10:00 AM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.16	s.u.			Field	09/13/2012 910
Conductivity	1297	µmhos/cm			Field	09/13/2012 910
Dissolved Oxygen	1.70	mg/L			Field	09/13/2012 910
Dissolved Oxygen (pct)	16.1	%			Field	09/13/2012 910
Turbidity	4.10	NTU			Field	09/13/2012 910
Temperature	11.0	°C			Field	09/13/2012 910
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	583	mg/L		5	SM 2320B	09/17/2012 2145 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	637	mg/L		5	SM 2320B	09/17/2012 2145 KV
Alkalinity, Carbonate as CO <sub>3</sub>	36	mg/L		5	SM 2320B	09/17/2012 2145 KV
Chloride	2	mg/L		1	EPA 300.0	09/18/2012 553 AM
Fluoride	0.3	mg/L		0.1	SM 4500FC	09/17/2012 2145 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	09/25/2012 1250 RH
Sulfate	137	mg/L		1	EPA 300.0	09/18/2012 553 AM
Calcium	2	mg/L		1	EPA 200.7	09/14/2012 2055 DG
Magnesium	1	mg/L		1	EPA 200.7	09/14/2012 2055 DG
Potassium	3	mg/L		1	EPA 200.7	09/14/2012 2055 DG
Sodium	352	mg/L		1	EPA 200.7	09/14/2012 2055 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1343 RH
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	09/17/2012 2145 KV
Electrical Conductivity	1360	µmhos/cm		5	SM 2510B	09/17/2012 2145 KV
Total Dissolved Solids (180)	830	mg/L		10	SM 2540	09/15/2012 1253 JCG
<b>Data Quality</b>						
Cation Sum	15.61	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	14.59	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	3.40	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	850	mg/L		10	SM 1030E	09/28/2012 1417 WN

## These results apply only to the samples tested.

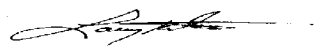
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-005  
**ClientSample ID:** P42868W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 9:10:00 AM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2055	DG
Arsenic	0.016	mg/L		0.005	EPA 200.8	09/14/2012 2014	MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 2014	MS
Boron	0.3	mg/L		0.1	EPA 200.7	09/14/2012 2055	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 2014	MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2055	DG
Copper	ND	mg/L		0.01	EPA 200.8	09/17/2012 1529	MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2055	DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 2014	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1243	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 2014	MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2055	DG
Selenium	ND	mg/L		0.005	EPA 200.8	09/14/2012 2014	MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1529	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	09/14/2012 2014	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 2014	MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 2055	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1453	MS
<b>Metals - Total</b>							
Iron	0.99	mg/L		0.05	EPA 200.7	09/18/2012 1623	DG
Manganese	ND	mg/L		0.02	EPA 200.7	09/18/2012 1623	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-005  
**ClientSample ID:** P42868W  
**COC:** 143930

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 9:10:00 AM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		2	SM 7110B	10/01/2012 000 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	10/01/2012 000 SH
Gross Beta	ND	pCi/L		4	SM 7110B	10/01/2012 000 SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	10/01/2012 000 SH
Lead 210	ND	pCi/L		1	OTW01	10/05/2012 1304 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/05/2012 1304 SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1540 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1540 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/02/2012 1110 SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/24/2012 1057 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/24/2012 1057 WN
Thorium 230	ND	pCi/L		0.2	ACW10	09/28/2012 804 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/28/2012 804 MB
Thorium 229 Tracer (30-120)	69.8	%		0.2	ACW10	09/28/2012 804 MB
<b>Radionuclides - Suspended</b>						
Lead 210	1.0	pCi/L		1	OTW01	10/11/2012 000 SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/11/2012 000 SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2012 1516 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 1516 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219 SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/05/2012 813 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/05/2012 813 MB
Thorium 229 Tracer (30-120)	72.8	%		0.2	ACW10	10/05/2012 813 MB

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-009  
**ClientSample ID:** P61006W  
**COC:** 131191

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 1:40:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.19	s.u.			Field	09/13/2012 1340
Conductivity	1010	µmhos/cm			Field	09/13/2012 1340
Dissolved Oxygen	1.65	mg/L			Field	09/13/2012 1340
Dissolved Oxygen (pct)	15.5	%			Field	09/13/2012 1340
Turbidity	2.58	NTU			Field	09/13/2012 1340
Temperature	10.6	°C			Field	09/13/2012 1340
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	522	mg/L		5	SM 2320B	09/17/2012 2247 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	588	mg/L		5	SM 2320B	09/17/2012 2247 KV
Alkalinity, Carbonate as CO <sub>3</sub>	24	mg/L		5	SM 2320B	09/17/2012 2247 KV
Chloride	1	mg/L		1	EPA 300.0	09/18/2012 630 AM
Fluoride	0.1	mg/L		0.1	SM 4500FC	09/17/2012 2247 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	09/28/2012 1543 RH
Sulfate	86	mg/L		1	EPA 300.0	09/18/2012 630 AM
Calcium	19	mg/L		1	EPA 200.7	09/14/2012 2119 DG
Magnesium	10	mg/L		1	EPA 200.7	09/14/2012 2119 DG
Potassium	7	mg/L		1	EPA 200.7	09/14/2012 2119 DG
Sodium	232	mg/L		1	EPA 200.7	09/14/2012 2119 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1346 RH
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	09/17/2012 2247 KV
Electrical Conductivity	1080	µmhos/cm		5	SM 2510B	09/17/2012 2247 KV
Total Dissolved Solids (180)	670	mg/L		10	SM 2540	09/15/2012 1258 JCG
<b>Data Quality</b>						
Cation Sum	12.00	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	12.25	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	1.05	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	670	mg/L		10	SM 1030E	09/28/2012 1417 WN

## These results apply only to the samples tested.

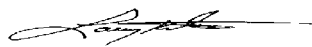
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-009  
**ClientSample ID:** P61006W  
**COC:** 131191

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 1:40:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2119	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/14/2012 2058	MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 2058	MS
Boron	0.1	mg/L		0.1	EPA 200.7	09/14/2012 2119	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 2058	MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2119	DG
Copper	ND	mg/L		0.01	EPA 200.8	09/14/2012 2058	MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2119	DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 2058	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1250	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 2058	MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2119	DG
Selenium	ND	mg/L		0.005	EPA 200.8	09/14/2012 2058	MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1549	MS
Uranium	0.0019	mg/L		0.0003	EPA 200.8	09/14/2012 2058	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 2058	MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 2119	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1538	MS
<b>Metals - Total</b>							
Iron	0.43	mg/L		0.05	EPA 200.7	09/18/2012 1647	DG
Manganese	ND	mg/L		0.02	EPA 200.7	09/18/2012 1647	DG

**These results apply only to the samples tested.**

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

**RL - Reporting Limit**

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-009  
**ClientSample ID:** P61006W  
**COC:** 131191

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 1:40:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.1	pCi/L		2	SM 7110B	10/01/2012 000	SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	10/01/2012 000	SH
Gross Beta	5.8	pCi/L		4	SM 7110B	10/01/2012 000	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	10/01/2012 000	SH
Lead 210	ND	pCi/L		1	OTW01	10/08/2012 1038	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/08/2012 1038	SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1702	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1702	SH
Radium 226	0.9	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	10/02/2012 1110	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/24/2012 2301	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/24/2012 2301	WN
Thorium 230	0.03	pCi/L		0.2	ACW10	09/28/2012 804	MB
Thorium 230 Precision (±)	0.04	pCi/L			ACW10	09/28/2012 804	MB
Thorium 229 Tracer (30-120)	75.4	%		0.2	ACW10	09/28/2012 804	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	10/11/2012 000	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	10/11/2012 000	SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2012 1727	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 1727	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1529	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1529	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/05/2012 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/05/2012 813	MB
Thorium 229 Tracer (30-120)	77.0	%		0.2	ACW10	10/05/2012 813	MB

## These results apply only to the samples tested.

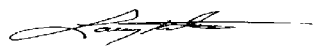
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-008  
**ClientSample ID:** P61007W  
**COC:** 131191

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 1:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.61	s.u.			Field	09/13/2012 1300
Conductivity	1079	µmhos/cm			Field	09/13/2012 1300
Dissolved Oxygen	1.92	mg/L			Field	09/13/2012 1300
Dissolved Oxygen (pct)	18.6	%			Field	09/13/2012 1300
Turbidity	11.25	NTU			Field	09/13/2012 1300
Temperature	11.2	°C			Field	09/13/2012 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	511	mg/L		5	SM 2320B	09/17/2012 2234 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	568	mg/L		5	SM 2320B	09/17/2012 2234 KV
Alkalinity, Carbonate as CO <sub>3</sub>	27	mg/L		5	SM 2320B	09/17/2012 2234 KV
Chloride	3	mg/L		1	EPA 300.0	09/18/2012 621 AM
Fluoride	0.2	mg/L		0.1	SM 4500FC	09/17/2012 2234 KV
Nitrogen, Nitrate+Nitrite (as N)	1.1	mg/L		0.1	EPA 353.2	09/25/2012 1253 RH
Sulfate	94	mg/L		1	EPA 300.0	09/18/2012 621 AM
Calcium	7	mg/L		1	EPA 200.7	09/14/2012 2117 DG
Magnesium	4	mg/L		1	EPA 200.7	09/14/2012 2117 DG
Potassium	4	mg/L		1	EPA 200.7	09/14/2012 2117 DG
Sodium	288	mg/L		1	EPA 200.7	09/14/2012 2117 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1348 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	09/17/2012 2234 KV
Electrical Conductivity	1130	µmhos/cm		5	SM 2510B	09/17/2012 2234 KV
Total Dissolved Solids (180)	710	mg/L		10	SM 2540	09/15/2012 1257 JCG
<b>Data Quality</b>						
Cation Sum	13.28	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Anion Sum	12.34	meq/L		0.01	SM 1030E	09/28/2012 1417 WN
Cation-Anion Balance (± 5%)	3.68	%		0.01	SM 1030E	09/28/2012 1417 WN
Solids, Total Dissolved (Calc)	710	mg/L		10	SM 1030E	09/28/2012 1417 WN

## These results apply only to the samples tested.

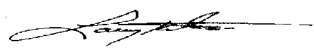
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-008  
**ClientSample ID:** P61007W  
**COC:** 131191

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 1:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 2117	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	09/14/2012 2053	MS
Barium	ND	mg/L		0.5	EPA 200.8	09/14/2012 2053	MS
Boron	0.2	mg/L		0.1	EPA 200.7	09/14/2012 2117	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/14/2012 2053	MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 2117	DG
Copper	ND	mg/L		0.01	EPA 200.8	09/14/2012 2053	MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 2117	DG
Lead	ND	mg/L		0.02	EPA 200.8	09/14/2012 2053	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1248	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/14/2012 2053	MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 2117	DG
Selenium	0.007	mg/L		0.005	EPA 200.8	09/14/2012 2053	MS
Silver	ND	mg/L		0.003	EPA 200.8	09/17/2012 1544	MS
Uranium	0.0131	mg/L		0.0003	EPA 200.8	09/14/2012 2053	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/14/2012 2053	MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 2117	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1533	MS
<b>Metals - Total</b>							
Iron	0.88	mg/L		0.05	EPA 200.7	09/18/2012 1644	DG
Manganese	0.03	mg/L		0.02	EPA 200.7	09/18/2012 1644	DG

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:   
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/24/2012  
**Report ID** S1209244001

**ProjectName:** Kendrick  
**Lab ID:** S1209244-008  
**ClientSample ID:** P61007W  
**COC:** 131191

**WorkOrder:** S1209244  
**CollectionDate:** 9/13/2012 1:00:00 PM  
**DateReceived:** 9/14/2012 8:33:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	10.9	pCi/L		2	SM 7110B	10/01/2012 000	SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	10/01/2012 000	SH
Gross Beta	4.3	pCi/L		4	SM 7110B	10/01/2012 000	SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	10/01/2012 000	SH
Lead 210	1.5	pCi/L		1	OTW01	10/08/2012 1038	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	10/08/2012 1038	SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1702	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1702	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/02/2012 1110	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/02/2012 1110	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/24/2012 2000	WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/24/2012 2000	WN
Thorium 230	ND	pCi/L		0.2	ACW10	09/28/2012 804	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/28/2012 804	MB
Thorium 229 Tracer (30-120)	87.4	%		0.2	ACW10	09/28/2012 804	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	10/11/2012 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 000	SH
Polonium 210	ND	pCi/L		1	OTW01	10/11/2012 1727	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/11/2012 1727	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1529	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1529	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/05/2012 813	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/05/2012 813	MB
Thorium 229 Tracer (30-120)	83.7	%		0.2	ACW10	10/05/2012 813	MB

## These results apply only to the samples tested.

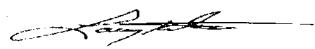
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Lacey Ketron, Water Lab Supervisor

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-002  
**ClientSample ID:** SEI WELL01 (P22584P)  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 5:00:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.72	s.u.			Field	09/11/2012 1700
Conductivity	1023	µmhos/cm			Field	09/11/2012 1700
Dissolved Oxygen	2.21	mg/L			Field	09/11/2012 1700
Dissolved Oxygen (pct)	21.1	%			Field	09/11/2012 1700
Turbidity	1.59	NTU			Field	09/11/2012 1700
Temperature	11.5	°C			Field	09/11/2012 1700
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	469	mg/L		5	SM 2320B	09/14/2012 2017 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	469	mg/L		5	SM 2320B	09/14/2012 2017 KV
Alkalinity, Carbonate as CO <sub>3</sub>	51	mg/L		5	SM 2320B	09/14/2012 2017 KV
Chloride	8	mg/L		1	EPA 300.0	09/18/2012 418 AM
Fluoride	0.3	mg/L		0.1	SM 4500FC	09/14/2012 2017 KV
Nitrogen, Nitrate+Nitrite (as N)	0.1	mg/L		0.1	EPA 353.2	09/24/2012 1447 RH
Sulfate	79	mg/L		1	EPA 300.0	09/18/2012 418 AM
Calcium	3	mg/L		1	EPA 200.7	09/14/2012 1639 DG
Magnesium	2	mg/L		1	EPA 200.7	09/14/2012 1639 DG
Potassium	5	mg/L		1	EPA 200.7	09/14/2012 1639 DG
Sodium	269	mg/L		1	EPA 200.7	09/14/2012 1639 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1337 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	09/14/2012 2017 KV
Electrical Conductivity	1040	µmhos/cm		5	SM 2510B	09/14/2012 2017 KV
Total Dissolved Solids (180)	660	mg/L		10	SM 2540	09/15/2012 1154 JCG
<b>Data Quality</b>						
Cation Sum	12.16	meq/L		0.01	SM 1030E	09/19/2012 1615 LJK
Anion Sum	11.28	meq/L		0.01	SM 1030E	09/19/2012 1615 LJK
Cation-Anion Balance (± 5%)	3.77	%		0.01	SM 1030E	09/19/2012 1615 LJK
Solids, Total Dissolved (Calc)	650	mg/L		10	SM 1030E	09/19/2012 1615 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-002  
**ClientSample ID:** SEI WELL01 (P22584P)  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 5:00:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 1639	DG
Arsenic	0.010	mg/L		0.005	EPA 200.8	09/13/2012 2223	MS
Barium	ND	mg/L		0.5	EPA 200.8	09/13/2012 2223	MS
Boron	ND	mg/L		0.1	EPA 200.7	09/14/2012 1639	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/13/2012 2223	MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 1639	DG
Copper	ND	mg/L		0.01	EPA 200.8	09/13/2012 2223	MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 1639	DG
Lead	ND	mg/L		0.02	EPA 200.8	09/13/2012 2223	MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1145	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/13/2012 2223	MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 1639	DG
Selenium	0.008	mg/L		0.005	EPA 200.8	09/13/2012 2223	MS
Silver	ND	mg/L		0.003	EPA 200.8	09/13/2012 2223	MS
Uranium	0.0170	mg/L		0.0003	EPA 200.8	09/13/2012 2223	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/13/2012 2223	MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 1639	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1408	MS
<b>Metals - Total</b>							
Iron	0.32	mg/L		0.05	EPA 200.7	09/18/2012 1551	DG
Manganese	ND	mg/L		0.02	EPA 200.7	09/18/2012 1551	DG

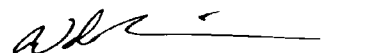
## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-002  
**ClientSample ID:** SEI WELL01 (P22584P)  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 5:00:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	24.3	pCi/L		2	SM 7110B	09/25/2012 036	SH
Gross Alpha Precision (±)	4.0	pCi/L			SM 7110B	09/25/2012 036	SH
Gross Beta	10.0	pCi/L		3	SM 7110B	09/25/2012 036	SH
Gross Beta Precision (±)	3.1	pCi/L			SM 7110B	09/25/2012 036	SH
Lead 210	2.1	pCi/L		1	OTW01	10/05/2012 1304	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/05/2012 1304	SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1540	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1540	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/27/2012 1017	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/27/2012 1017	SH
Radium 228	ND	pCi/L		1	Ga-Tech	09/30/2012 2059	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	09/30/2012 2059	AA
Thorium 230	ND	pCi/L		0.2	ACW10	09/25/2012 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/25/2012 000	MB
Thorium 229 Tracer (30-120)	83.9	%		0.2	ACW10	09/25/2012 000	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	10/04/2012 1215	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	10/03/2012 1303	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/03/2012 1303	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/04/2012 1108	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/04/2012 1108	MB
Thorium 229 Tracer (30-120)	78.2	%		0.2	ACW10	10/04/2012 1108	MB

## These results apply only to the samples tested.

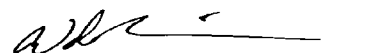
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-003  
**ClientSample ID:** FD-SEI WELL01 (P22584P)  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 5:10:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.72	s.u.			Field	09/11/2012 1710
Conductivity	1023	µmhos/cm			Field	09/11/2012 1710
Dissolved Oxygen	2.12	mg/L			Field	09/11/2012 1710
Dissolved Oxygen (pct)	20.3	%			Field	09/11/2012 1710
Turbidity	0.65	NTU			Field	09/11/2012 1710
Temperature	11.9	°C			Field	09/11/2012 1710
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	476	mg/L		5	SM 2320B	09/14/2012 2029 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	473	mg/L		5	SM 2320B	09/14/2012 2029 KV
Alkalinity, Carbonate as CO <sub>3</sub>	53	mg/L		5	SM 2320B	09/14/2012 2029 KV
Chloride	8	mg/L		1	EPA 300.0	09/18/2012 427 AM
Fluoride	0.3	mg/L		0.1	SM 4500FC	09/14/2012 2029 KV
Nitrogen, Nitrate+Nitrite (as N)	0.1	mg/L		0.1	EPA 353.2	09/24/2012 1448 RH
Sulfate	86	mg/L		1	EPA 300.0	09/18/2012 427 AM
Calcium	3	mg/L		1	EPA 200.7	09/14/2012 1641 DG
Magnesium	1	mg/L		1	EPA 200.7	09/14/2012 1641 DG
Potassium	5	mg/L		1	EPA 200.7	09/14/2012 1641 DG
Sodium	275	mg/L		1	EPA 200.7	09/14/2012 1641 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	09/21/2012 1338 RH
<b>General Parameters</b>						
pH	9.2	s.u.		0.1	SM 4500 H B	09/14/2012 2029 KV
Electrical Conductivity	1070	µmhos/cm		5	SM 2510B	09/14/2012 2029 KV
Total Dissolved Solids (180)	680	mg/L		10	SM 2540	09/15/2012 1155 JCG
<b>Data Quality</b>						
Cation Sum	12.33	meq/L		0.01	SM 1030E	09/19/2012 1615 LJK
Anion Sum	11.55	meq/L		0.01	SM 1030E	09/19/2012 1615 LJK
Cation-Anion Balance (± 5%)	3.25	%		0.01	SM 1030E	09/19/2012 1615 LJK
Solids, Total Dissolved (Calc)	660	mg/L		10	SM 1030E	09/19/2012 1615 LJK

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

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- E Value above quantitation range
- J Analyte detected below quantitation limits
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-003  
**ClientSample ID:** FD-SEI WELL01 (P22584P)  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 5:10:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	09/14/2012 1641 DG
Arsenic	0.009	mg/L		0.005	EPA 200.8	09/13/2012 2228 MS
Barium	ND	mg/L		0.5	EPA 200.8	09/13/2012 2228 MS
Boron	ND	mg/L		0.1	EPA 200.7	09/14/2012 1641 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	09/13/2012 2228 MS
Chromium	ND	mg/L		0.01	EPA 200.7	09/14/2012 1641 DG
Copper	ND	mg/L		0.01	EPA 200.8	09/13/2012 2228 MS
Iron	ND	mg/L		0.05	EPA 200.7	09/14/2012 1641 DG
Lead	ND	mg/L		0.02	EPA 200.8	09/13/2012 2228 MS
Mercury	ND	mg/L		0.001	EPA 245.1	09/18/2012 1147 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	09/13/2012 2228 MS
Nickel	ND	mg/L		0.01	EPA 200.7	09/14/2012 1641 DG
Selenium	0.008	mg/L		0.005	EPA 200.8	09/13/2012 2228 MS
Silver	ND	mg/L		0.003	EPA 200.8	09/13/2012 2228 MS
Uranium	0.0162	mg/L		0.0003	EPA 200.8	09/13/2012 2228 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	09/13/2012 2228 MS
Zinc	ND	mg/L		0.01	EPA 200.7	09/14/2012 1641 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	09/21/2012 1423 MS
<b>Metals - Total</b>						
Iron	0.13	mg/L		0.05	EPA 200.7	09/18/2012 1553 DG
Manganese	ND	mg/L		0.02	EPA 200.7	09/18/2012 1553 DG

## These results apply only to the samples tested.

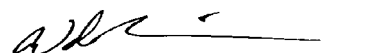
## RL - Reporting Limit

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Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 10/12/2012  
**Report ID:** S1209230001

**ProjectName:** Kendrick  
**Lab ID:** S1209230-003  
**ClientSample ID:** FD-SEI WELL01 (P22584P)  
**COC:** 143928

**WorkOrder:** S1209230  
**CollectionDate:** 9/11/2012 5:10:00 PM  
**DateReceived:** 9/12/2012 8:01:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	23.9	pCi/L		2	SM 7110B	09/25/2012 036	SH
Gross Alpha Precision (±)	3.8	pCi/L			SM 7110B	09/25/2012 036	SH
Gross Beta	9.4	pCi/L		3	SM 7110B	09/25/2012 036	SH
Gross Beta Precision (±)	2.9	pCi/L			SM 7110B	09/25/2012 036	SH
Lead 210	1.9	pCi/L		1	OTW01	10/05/2012 1304	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	10/05/2012 1304	SH
Polonium 210	ND	pCi/L		1	OTW01	10/04/2012 1540	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/04/2012 1540	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	09/27/2012 1017	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	09/27/2012 1017	SH
Radium 228	ND	pCi/L		1	Ga-Tech	10/01/2012 000	AA
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	10/01/2012 000	AA
Thorium 230	ND	pCi/L		0.2	ACW10	09/25/2012 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	09/25/2012 000	MB
Thorium 229 Tracer (30-120)	83.5	%		0.2	ACW10	09/25/2012 000	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	10/04/2012 1215	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	10/04/2012 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	10/03/2012 1303	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	10/03/2012 1303	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/04/2012 1219	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/04/2012 1219	SH
Thorium 230	ND	pCi/L		0.2	ACW10	10/04/2012 1108	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	10/04/2012 1108	MB
Thorium 229 Tracer (30-120)	82.7	%		0.2	ACW10	10/04/2012 1108	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**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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- B Analyte detected in the associated Method Blank
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: ABWELL01 Date: 11-13-12 Time: 1400  
~~11-7-12~~ ~~1300~~

Landowner

Name: Austin Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr \_\_\_\_\_

SEC \_\_\_\_\_

TWN \_\_\_\_\_

RNG \_\_\_\_\_

Picture #(s) /(P:\Strata\12145\3Q12-4Q12) Stock \_\_\_\_\_

PHOTO 01 - ABWELL01.JPG

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. ?

Location (Decimal Degrees)

Lat N 44.60320

Long W 104.99661

Elev. 4360

Water Quality

pH 8.92

Cond. 1588

Temp. °C 9.8

Turbidity (ntu) 2.05

D.O. (mg/L) 1.84 / 16.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Austin's new house well installed  
this fall - water clear - no odor - 7  
sample bottles - 4.14

LCF  
COL# 131189

\* Field Duplicate

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: FD-ABWELL01 Date: 11-13-12 Time: 1410

**Landowner**

Name: Austin Buick

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 8.94

Cond. 1564

Temp. °C 9.9

Turbidity (ntu) 1.64

D.O. (mg/L) 1.72 / 15.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Field Duplicate

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



*\* NO sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P150688W Date: 10-31-12 Time: 1000

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESW

SEC 25

TWN 53

RNG 68

Picture #(s) 2 (P: Strata\12145\3Q12-4Q12) Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P150688W

**Location (Decimal Degrees)**

Lat N 44.54636

Long W 104.97839

Elev. 4450

**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 - Good well that feeds  
water tanks - well shut down for winter  
- winterized

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P21130P Date: 10-31-12 Time: 1330

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

SEC 26

TWN 53

RNG 68

Picture #(s) 6(P: strata\12145\3Q12-4Q12)

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P21130P

**Location (Decimal Degrees)**

Lat N 44.55046

Long W 104.99354

Elev. 4410

**Water Quality**

pH 7.64

Cond. 880

Temp. °C 10.1

Turbidity (ntu) 0.07

D.O. (mg/L) 3.09/28.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: —

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: 65°F

Comments: Solar powered well - water clear -  
no odor - 7 sample bottles - 4.14

LCF  
COC# 143933

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P22583P Date: 10-30-12 Time: 1315

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWSW

SEC 31

TWN 53

RNG 67

Picture #(s) 2 (P: strata/12145\3Q12-4Q12) Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P22583P

**Location (Decimal Degrees)**

Lat N 44.52795

Long W 104.96209

Elev. 4304

**Water Quality**

pH 8.84

Cond. 1741  $\mu$ S

Temp. °C 11.3

Turbidity (ntu) 0.15

D.O. (mg/L) 2.82/27.4

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: 65°F

Comments: Well that feeds stock tanks via  
pipelines - water clear - no odor - 7  
sample bottles - 4.14

LCF  
COC# 131190

\* NO Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P22585P Date: 10-31-12 Time: 0915

Landowner

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SWSW

SEC 31

TWN 53

RNG 67

Picture #(s) 1 (P: Strata\12145\3Q12-4Q12)

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P22585P

Location (Decimal Degrees)

Lat N 44.54317

Long W 104.95710

Elev. 4350

Water Quality

pH \_\_\_\_\_

Cond. \_\_\_\_\_

Temp. °C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Windmill well - No sample - well  
not functioning

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P58961W Date: 10-10-12 Time: 1400

**Landowner**

Name: Evans

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW NW

SEC 32

TWN 54

RNG 67

Picture #(s) 1, 2 (P:\Strata\12145\3Q12) Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P58961W

**Location (Decimal Degrees)**

Lat N 44.62564

Long W 104.94171

Elev. 4152

**Water Quality**

pH 8.68

Cond. 1102

Temp. °C 13.9

Turbidity (ntu) 1.62

D.O. (mg/L) 1.87/18.8

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles - 4.14

COC# 143931

\* no sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P58963W Date: 10-10-12 Time: 1430

Landowner

Name: Evans

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SE SW

SEC 30

TWN 54

RNG 67

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P58963W

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 - well not functioning.  
Has not worked for some time



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 12/5/2012  
**Report ID:** S1211011001

**ProjectName:** Kendrick  
**Lab ID:** S1211011-001  
**ClientSample ID:** P22583P  
**COC:** 131190

**WorkOrder:** S1211011  
**CollectionDate:** 10/30/2012 1:15:00 PM  
**DateReceived:** 10/31/2012 8:02:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.84	s.u.			Field	10/30/2012 1315
Conductivity	1741	µmhos/cm			Field	10/30/2012 1315
Dissolved Oxygen	2.82	mg/L			Field	10/30/2012 1315
Dissolved Oxygen (pct)	27.4	%			Field	10/30/2012 1315
Turbidity	0.15	NTU			Field	10/30/2012 1315
Temperature	11.3	°C			Field	10/30/2012 1315
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	579	mg/L		5	SM 2320B	11/02/2012 2114 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	637	mg/L		5	SM 2320B	11/02/2012 2114 KV
Alkalinity, Carbonate as CO <sub>3</sub>	34	mg/L		5	SM 2320B	11/02/2012 2114 KV
Chloride	5	mg/L		1	EPA 300.0	11/02/2012 1949 AM
Fluoride	1.2	mg/L		0.1	SM 4500FC	11/02/2012 2114 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/02/2012 1036 AMB
Sulfate	421	mg/L		1	EPA 300.0	11/02/2012 1949 AM
Calcium	6	mg/L		1	EPA 200.7	11/02/2012 1316 DG
Magnesium	3	mg/L		1	EPA 200.7	11/02/2012 1316 DG
Potassium	6	mg/L		1	EPA 200.7	11/02/2012 1316 DG
Sodium	479	mg/L		1	EPA 200.7	11/02/2012 1316 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	11/09/2012 1629 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	11/02/2012 2114 KV
Electrical Conductivity	1810	µmhos/cm		5	SM 2510B	11/02/2012 2114 KV
Total Dissolved Solids (180)	1250	mg/L		10	SM 2540	11/01/2012 1610 JCG
<b>Data Quality</b>						
Cation Sum	21.50	meq/L		0.01	SM 1030E	11/06/2012 725 CJM
Anion Sum	20.55	meq/L		0.01	SM 1030E	11/06/2012 725 CJM
Cation-Anion Balance (± 5%)	2.26	%		0.01	SM 1030E	11/06/2012 725 CJM
Solids, Total Dissolved (Calc)	1270	mg/L		10	SM 1030E	11/06/2012 725 CJM

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 3



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 12/5/2012  
**Report ID:** S1211011001

**ProjectName:** Kendrick  
**Lab ID:** S1211011-001  
**ClientSample ID:** P22583P  
**COC:** 131190

**WorkOrder:** S1211011  
**CollectionDate:** 10/30/2012 1:15:00 PM  
**DateReceived:** 10/31/2012 8:02:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/02/2012 1316 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/05/2012 1233 MS
Barium	ND	mg/L		0.5	EPA 200.8	11/05/2012 1233 MS
Boron	0.5	mg/L		0.1	EPA 200.7	11/02/2012 1316 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/05/2012 1233 MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/02/2012 1316 DG
Copper	0.01	mg/L		0.01	EPA 200.8	11/05/2012 1233 MS
Iron	ND	mg/L		0.05	EPA 200.7	11/02/2012 1316 DG
Lead	ND	mg/L		0.02	EPA 200.8	11/05/2012 1233 MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/02/2012 1043 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/05/2012 1233 MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/02/2012 1316 DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/05/2012 1233 MS
Silver	ND	mg/L		0.003	EPA 200.8	11/05/2012 1233 MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	11/05/2012 1233 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/05/2012 1233 MS
Zinc	ND	mg/L		0.01	EPA 200.7	11/02/2012 1316 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	11/08/2012 2231 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	11/02/2012 1427 BK
Manganese	ND	mg/L		0.02	EPA 200.7	11/02/2012 1427 BK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 12/5/2012  
**Report ID:** S1211011001

**ProjectName:** Kendrick  
**Lab ID:** S1211011-001  
**ClientSample ID:** P22583P  
**COC:** 131190

**WorkOrder:** S1211011  
**CollectionDate:** 10/30/2012 1:15:00 PM  
**DateReceived:** 10/31/2012 8:02:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		5	SM 7110B	11/19/2012 1737	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	11/19/2012 1737	SH
Gross Beta	ND	pCi/L		7	SM 7110B	11/19/2012 1737	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	11/19/2012 1737	SH
Lead 210	1.3	pCi/L		1	OTW01	11/14/2012 1548	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	11/14/2012 1548	SH
Polonium 210	ND	pCi/L		1	OTW01	11/14/2012 1155	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	11/14/2012 1155	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/11/2012 1907	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/11/2012 1907	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/23/2012 2302	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/23/2012 2302	MK
Thorium 230	-0.2	pCi/L		0.2	ACW10	11/19/2012 000	MB
Thorium 230 Precision (±)	1.3	pCi/L			ACW10	11/19/2012 000	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	11/28/2012 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	11/28/2012 000	SH
Polonium 210	ND	pCi/L		1	OTW01	11/28/2012 1422	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	11/28/2012 1422	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/20/2012 1259	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/20/2012 1259	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/30/2012 907	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/30/2012 907	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Kendrick  
**Lab ID:** S1211034-001  
**ClientSample ID:** P21130P  
**COC:** 143933

**Date Reported:** 1/18/2013  
**Report ID:** S1211034002  
(Replaces S1211034001)  
**WorkOrder:** S1211034  
**CollectionDate:** 10/31/2012 1:30:00 PM  
**DateReceived:** 11/1/2012 2:29:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.64	s.u.			Field	10/31/2012 1330
Conductivity	880	µmhos/cm			Field	10/31/2012 1330
Dissolved Oxygen	3.09	mg/L			Field	10/31/2012 1330
Dissolved Oxygen (pct)	28.4	%			Field	10/31/2012 1330
Turbidity	0.07	NTU			Field	10/31/2012 1330
Temperature	10.1	°C			Field	10/31/2012 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	399	mg/L		5	SM 2320B	11/05/2012 1843 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	472	mg/L		5	SM 2320B	11/05/2012 1843 KV
Alkalinity, Carbonate as CO <sub>3</sub>	7	mg/L		5	SM 2320B	11/05/2012 1843 KV
Chloride	3	mg/L		1	EPA 300.0	11/02/2012 2017 AM
Fluoride	0.1	mg/L		0.1	SM 4500FC	11/05/2012 1843 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/05/2012 945 AMB
Sulfate	85	mg/L		1	EPA 300.0	11/02/2012 2017 AM
Calcium	41	mg/L		1	EPA 200.7	11/02/2012 1512 DG
Magnesium	22	mg/L		1	EPA 200.7	11/02/2012 1512 DG
Potassium	14	mg/L		1	EPA 200.7	11/02/2012 1512 DG
Sodium	138	mg/L		1	EPA 200.7	11/02/2012 1512 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	11/12/2012 1030 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	11/05/2012 1843 KV
Electrical Conductivity	869	µmhos/cm		5	SM 2510B	11/05/2012 1843 KV
Total Dissolved Solids (180)	560	mg/L		10	SM 2540	11/02/2012 1910 JCG
<b>Data Quality</b>						
Cation Sum	10.18	meq/L		0.01	SM 1030E	11/08/2012 1545 CJM
Anion Sum	9.86	meq/L		0.01	SM 1030E	11/08/2012 1545 CJM
Cation-Anion Balance (± 5%)	1.59	%		0.01	SM 1030E	11/08/2012 1545 CJM
Solids, Total Dissolved (Calc)	540	mg/L		10	SM 1030E	11/08/2012 1545 CJM

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 3

**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 1/18/2013  
**Report ID:** S1211034002  
(Replaces S1211034001)

**ProjectName:** Kendrick  
**Lab ID:** S1211034-001  
**ClientSample ID:** P21130P  
**COC:** 143933

**WorkOrder:** S1211034  
**CollectionDate:** 10/31/2012 1:30:00 PM  
**DateReceived:** 11/1/2012 2:29:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	11/02/2012 1512 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	11/01/2012 2133 MS
Barium	ND	mg/L		0.5	EPA 200.8	11/01/2012 2133 MS
Boron	ND	mg/L		0.1	EPA 200.7	11/02/2012 1512 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	11/01/2012 2133 MS
Chromium	ND	mg/L		0.01	EPA 200.7	11/02/2012 1512 DG
Copper	ND	mg/L		0.01	EPA 200.8	11/01/2012 2133 MS
Iron	0.07	mg/L		0.05	EPA 200.7	11/02/2012 1512 DG
Lead	ND	mg/L		0.02	EPA 200.8	11/01/2012 2133 MS
Mercury	ND	mg/L		0.001	EPA 245.1	11/06/2012 953 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	11/01/2012 2133 MS
Nickel	ND	mg/L		0.01	EPA 200.7	11/02/2012 1512 DG
Selenium	ND	mg/L		0.005	EPA 200.8	11/01/2012 2133 MS
Silver	ND	mg/L		0.003	EPA 200.8	11/01/2012 2133 MS
Uranium	0.0130	mg/L		0.0003	EPA 200.8	11/01/2012 2133 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	11/01/2012 2133 MS
Zinc	0.01	mg/L		0.01	EPA 200.7	11/02/2012 1512 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	11/08/2012 2330 MS
<b>Metals - Total</b>						
Iron	0.11	mg/L		0.05	EPA 200.7	11/05/2012 1110 BK
Manganese	ND	mg/L		0.02	EPA 200.7	11/05/2012 1110 BK

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**ProjectName:** Kendrick  
**Lab ID:** S1211034-001  
**ClientSample ID:** P21130P  
**COC:** 143933

**Date Reported:** 1/18/2013  
**Report ID:** S1211034002  
(Replaces S1211034001)  
**WorkOrder:** S1211034  
**CollectionDate:** 10/31/2012 1:30:00 PM  
**DateReceived:** 11/1/2012 2:29:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.1	pCi/L		2	SM 7110B	11/19/2012 1737	SH
Gross Alpha Precision (±)	1.6	pCi/L			SM 7110B	11/19/2012 1737	SH
Gross Beta	13.1	pCi/L		3	SM 7110B	11/19/2012 1737	SH
Gross Beta Precision (±)	1.7	pCi/L			SM 7110B	11/19/2012 1737	SH
Lead 210	1.3	pCi/L		1	OTW01	11/14/2012 1548	SH
Lead 210 Precision (±)	0.5	pCi/L			OTW01	11/14/2012 1548	SH
Polonium 210	ND	pCi/L		1	OTW01	11/14/2012 1155	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	11/14/2012 1155	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	11/11/2012 1907	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	11/11/2012 1907	SH
Radium 228	ND	pCi/L		1	Ga-Tech	11/26/2012 405	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/26/2012 405	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/19/2012 000	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/19/2012 000	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.2	pCi/L		1	OTW01	12/03/2012 1115	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	12/03/2012 1115	SH
Polonium 210	ND	pCi/L		1	OTW01	11/29/2012 1611	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	11/29/2012 1611	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	11/20/2012 1509	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	11/20/2012 1509	SH
Thorium 230	ND	pCi/L		0.2	ACW10	11/30/2012 907	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/30/2012 907	MB
Thorium 229 Tracer (30-120)	93.1	pCi/L			ACW10	11/30/2012 907	MB

## These results apply only to the samples tested.

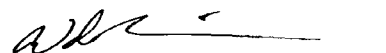
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

Page 3 of 3



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 11/28/2012  
**Report ID:** S1210224001

**ProjectName:** Kendrick  
**Lab ID:** S1210224-001  
**ClientSample ID:** P58961W  
**COC:** 143931

**WorkOrder:** S1210224  
**CollectionDate:** 10/10/2012 2:00:00 PM  
**DateReceived:** 10/11/2012 3:52:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.68	s.u.			Field	10/10/2012 1400
Conductivity	1102	µmhos/cm			Field	10/10/2012 1400
Dissolved Oxygen	1.87	mg/L			Field	10/10/2012 1400
Dissolved Oxygen (pct)	18.8	%			Field	10/10/2012 1400
Turbidity	1.62	NTU			Field	10/10/2012 1400
Temperature	13.9	°C			Field	10/10/2012 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	425	mg/L		5	SM 2320B	10/16/2012 1457 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	493	mg/L		5	SM 2320B	10/16/2012 1457 KV
Alkalinity, Carbonate as CO <sub>3</sub>	13	mg/L		5	SM 2320B	10/16/2012 1457 KV
Chloride	2	mg/L		1	EPA 300.0	10/13/2012 750 AM
Fluoride	0.4	mg/L		0.1	SM 4500FC	10/16/2012 1457 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/15/2012 1140 AMB
Sulfate	173	mg/L		1	EPA 300.0	10/13/2012 750 AM
Calcium	7	mg/L		1	EPA 200.7	10/12/2012 1607 DG
Magnesium	4	mg/L		1	EPA 200.7	10/12/2012 1607 DG
Potassium	7	mg/L		1	EPA 200.7	10/12/2012 1607 DG
Sodium	269	mg/L		1	EPA 200.7	10/12/2012 1607 DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	10/22/2012 1303 RH
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	10/16/2012 1457 KV
Electrical Conductivity	1220	µmhos/cm		5	SM 2510B	10/16/2012 1457 KV
Total Dissolved Solids (180)	760	mg/L		10	SM 2540	10/12/2012 1604 JCG
<b>Data Quality</b>						
Cation Sum	12.52	meq/L		0.01	SM 1030E	10/18/2012 1634 LJK
Anion Sum	12.17	meq/L		0.01	SM 1030E	10/18/2012 1634 LJK
Cation-Anion Balance (± 5%)	1.40	%		0.01	SM 1030E	10/18/2012 1634 LJK
Solids, Total Dissolved (Calc)	720	mg/L		10	SM 1030E	10/18/2012 1634 LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

Page 1 of 3

**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 11/28/2012  
**Report ID:** S1210224001

**ProjectName:** Kendrick  
**Lab ID:** S1210224-001  
**ClientSample ID:** P58961W  
**COC:** 143931

**WorkOrder:** S1210224  
**CollectionDate:** 10/10/2012 2:00:00 PM  
**DateReceived:** 10/11/2012 3:52:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	10/12/2012 1607 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	10/11/2012 2310 MS
Barium	ND	mg/L		0.5	EPA 200.8	10/11/2012 2310 MS
Boron	0.3	mg/L		0.1	EPA 200.7	10/12/2012 1607 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	10/11/2012 2310 MS
Chromium	ND	mg/L		0.01	EPA 200.7	10/12/2012 1607 DG
Copper	ND	mg/L		0.01	EPA 200.8	10/11/2012 2310 MS
Iron	0.06	mg/L		0.05	EPA 200.7	10/12/2012 1607 DG
Lead	ND	mg/L		0.02	EPA 200.8	10/11/2012 2310 MS
Mercury	ND	mg/L		0.001	EPA 245.1	10/16/2012 927 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	10/11/2012 2310 MS
Nickel	ND	mg/L		0.01	EPA 200.7	10/12/2012 1607 DG
Selenium	ND	mg/L		0.005	EPA 200.8	10/11/2012 2310 MS
Silver	ND	mg/L		0.003	EPA 200.8	10/11/2012 2310 MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	10/11/2012 2310 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	10/11/2012 2310 MS
Zinc	ND	mg/L		0.01	EPA 200.7	10/12/2012 1607 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	10/16/2012 1910 MS
<b>Metals - Total</b>						
Iron	0.07	mg/L		0.05	EPA 200.7	10/15/2012 1611 BK
Manganese	ND	mg/L		0.02	EPA 200.7	10/15/2012 1611 BK

**These results apply only to the samples tested.**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

**RL - Reporting Limit**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 11/28/2012  
**Report ID:** S1210224001

**ProjectName:** Kendrick  
**Lab ID:** S1210224-001  
**ClientSample ID:** P58961W  
**COC:** 143931

**WorkOrder:** S1210224  
**CollectionDate:** 10/10/2012 2:00:00 PM  
**DateReceived:** 10/11/2012 3:52:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.5	pCi/L		2	SM 7110B	11/01/2012 1649	SH
Gross Alpha Precision (±)	1.2	pCi/L			SM 7110B	11/01/2012 1649	SH
Gross Beta	4.9	pCi/L		4	SM 7110B	11/01/2012 1649	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	11/01/2012 1649	SH
Lead 210	ND	pCi/L		1	OTW01	11/12/2012 1406	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	11/12/2012 1406	SH
Polonium 210	ND	pCi/L		1	OTW01	11/12/2012 1232	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	11/12/2012 1232	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/31/2012 1451	MB
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/31/2012 1451	MB
Radium 228	ND	pCi/L		1	Ga-Tech	11/14/2012 431	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	11/14/2012 431	MK
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2012 819	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2012 819	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.2	pCi/L		1	OTW01	11/09/2012 1319	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	11/09/2012 1319	SH
Polonium 210	ND	pCi/L		1	OTW01	11/07/2012 1611	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	11/07/2012 1611	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	10/30/2012 1356	MB
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	10/30/2012 1356	MB
Thorium 230	ND	pCi/L		0.2	ACW10	11/12/2012 819	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	11/12/2012 819	MB

## These results apply only to the samples tested.

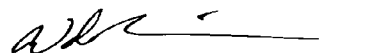
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P 31770W  
~~P 31770W~~ Date: 1-23-13 Time: 1400

Landowner

Name: Westover

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NENW

SEC 6

TWN 53

RNG 67

Picture #(s) 1, 2

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P31770W

Location (Decimal Degrees)

Lat ~~31.4154654~~

Long ~~104.95007~~

Elev. ~~4305~~

Water Quality

pH 7.87

Cond. 3280

Temp. °C 6.1

Turbidity (ntu) 1.43

D.O. (mg/L) 2.06/17.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: —

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: ~20°F

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC# 131187



*\* no sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P98245W Date: 1-23-13 Time: 1445

**Landowner**

Name: Westover

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENW

SEC 6

TWN 52

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P98245W

**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 not - functioning - no  
sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TDWELL01 Date: 1-23-13 Time: 1500

**Landowner**

Name: Davis

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWNW

SEC 7

TWN 52

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. —

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.30

Cond. 1025

Temp. °C 8.0

Turbidity (ntu) 0.55

D.O. (mg/L) 3.67 / 32.1

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: ~ 20°F

Comments: Water clear - no odor - 7 sample  
bottles - 4.14 - collected sample from  
outside frost free hydrant

LCF  
COC # 131187

\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P14695W Date: 1-23-13 Time: —

Landowner

Name: Davis

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NE NW

SEC 7

TWN 52

RNG 67

Picture #(s) \_\_\_\_\_

Stock ?

Domestic ?

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P14695W

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 not functioning - no pump in  
well - Old oil exploration drill hole - will  
be 2 more years before Davis can use  
it - Tom Davis said it is in Fox Hills formation

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P1440W Date: 2-7-13 Time: 1430

**Landowner**

Name: Hilcorp

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNW

SEC 11

TWN 52

RNG 68

Industrial ☒

Picture #(s) #1

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P1440W

**Location (Decimal Degrees)**

Lat 44.50793

Long 104.99809

Elev. 4391

**Water Quality**

pH 9.39

Cond. 1317

Temp. °C 11.8

Turbidity (ntu) 1.82

D.O. (mg/L) 1.50

Water Level (ft): \_\_\_\_\_

D.O. (%) 14.5

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - H2S smell - 7 sample  
bottles - 4.14 - IML Quote # 356

LCF Send results to: Mark Nicholson  
COC # 131188 Email: mnicholson@hilcorp.com

\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P 1400W Date: 2-7-13 Time: 1530

Landowner

Name: Hilcorp

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NWSE

SEC 11

TWN 52

RNG 68

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): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: No sample - well not functioning -  
Mark said Hilcorp only has to working  
source well (P1440W and P150187W)

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P150187W ~~P1400W~~ P150187W Date: 2-7-13 Time: 1500

**Landowner**

Name: Hilcorp.

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NWSE

SEC 11

TWN 52

RNG 68

Picture #(s) #2

Indust ✓  
Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat 44.50388

Long 104.98981

Elev. 4338

**Water Quality**

pH 10.26

Cond. 1899

Temp. °C 8.8

Turbidity (ntu) 2.11

D.O. (mg/L) 2.73

D.O. (%) 25.4

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: water clear - no odor - 7 sample  
bottles - 4.14 - IML Quote # 356

LCF

COC # 131188

*\*no sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: ARLOI Date: 3-13-13 Time: -

Landowner

Name: Reynolds

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NESW

SEC 5

TWN 53

RNG 67

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): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: No landowner permission (1)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*\* not sampled - not functioning*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: HBWELL03 Date: 3-13-13 Time: 0950

Landowner

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SWSW

SEC 5

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7324P

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH \_\_\_\_\_

Cond. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Well not functioning



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P 7328P Date: 2-6-13 Time: 1500

Landowner HOWELLO

Legal Location

Name: Burger

Qtr/Qtr NENE

Address \_\_\_\_\_

SEC 6

Phone# \_\_\_\_\_

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P 7328P

Location (Decimal Degrees)

Water Quality

Lat \_\_\_\_\_

pH 7.63

Long \_\_\_\_\_

Cond. 793

Elev. \_\_\_\_\_

Temp. °C 9.7

Turbidity (ntu) 10.39

D.O. (mg/L) 1.80

Water Level (ft): \_\_\_\_\_

D.O. (%) 16.3

Casing Height (ft): \_\_\_\_\_

ORP (mV) —

Comments: Water clear - no odor - 7 sample  
bottles - 4, 14 - Impl Quote #356

LCF

COC # 131188

*X No Sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P 7331P Date: 2-6-13 Time: 1530

Landowner HBWELLO2

Legal Location

Name: \_\_\_\_\_

Qtr/Qtr NESW

Address \_\_\_\_\_

SEC 6

Phone# \_\_\_\_\_

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7331P

Location (Decimal Degrees)

Water Quality

Lat \_\_\_\_\_

pH \_\_\_\_\_

Long \_\_\_\_\_

Cond. \_\_\_\_\_

Elev. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: No sample - Well not functioning

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: two1 Date: 3-14-13 Time: 1100

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr N1E1E

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.90

Cond. 2780

Temp. °C 9.0

Turbidity (ntu) 7.53

D.O. (mg/L) 2.54

Water Level (ft): \_\_\_\_\_

D.O. (%) 23.0

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample bottles -  
4.14

LCF  
COC # 148999

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: Two1 Date: 3-14-13 Time: 1140

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.11

Cond. 2620

Temp. °C 8.2

Turbidity (ntu) 0.39

D.O. (mg/L) 1.25

D.O. (%) 10.9

ORP (mV) 177

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

\_\_\_\_\_

\_\_\_\_\_

LCF

COC# 148999

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: HBWELLO4 Date: 3-13-13 Time: 0910

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7326P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.21

Cond. 1735

Temp. °C 7.9

Turbidity (ntu) 0.30

D.O. (mg/L) 2.79

Water Level (ft): \_\_\_\_\_

D.O. (%) 24.1

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

LCF

COC# 150250

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: -Two/- TW02 Date: 3-14-13 Time: 1140

**Landowner**

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 7

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P74302W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.11

Cond. 2620

Temp. °C 8.2

Turbidity (ntu) 0.39

D.O. (mg/L) 1.25

D.O. (%) 10.9

ORP (mV) 177

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC# 148999

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: HBWELL 05 Date: 3/14/13 Time: 12 30

**Landowner**

Name: Berger

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 8

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P7430P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.52

Cond. 1642

Temp. °C 10.4

Turbidity (ntu) 38.3

D.O. (mg/L) 2.94

D.O. (%) 27.1

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: water ~~turbid~~ - no odor - 7 sample bottles -  
4.14 ↑ water rust colored.

HCF

COC# 148999

*\* Field Duplicate*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: FD-HBWELLOS Date: 3-14-13 Time: 1300

Landowner

Name: Berger

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 7.47

Cond. 1696

Temp. °C 10.1

Turbidity (ntu) 13.51

D.O. (mg/L) 2.10

Water Level (ft): \_\_\_\_\_

D.O. (%) 18.9

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water slightly turbid (rust colored) -  
no odor - 7 sample bottle - 4.14

COC # 148999



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: ARH02 Date: 2-7-13 Time: 0930

**Landowner**

Name: Reynolds

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW NW

SEC 9

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. —

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.25

Cond. 2760

Temp. °C 7.3

Turbidity (ntu) 1.61

D.O. (mg/L) 3.77

Water Level (ft): \_\_\_\_\_

D.O. (%) 31.90

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water sample collected from outside  
frost free hydrant - water clear - no odor -  
7 sample bottle - 4.14 - Quote #356

LCF

COC# 131188

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: DW WELLOI Date: 3/14/13 Time: 1330

**Landowner**

Name: Wood

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SW 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 7.94

Cond. 3050

Temp. °C 10.9

Turbidity (ntu) 4.22

D.O. (mg/L) 1.36

Water Level (ft): \_\_\_\_\_

D.O. (%) 12.9

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC #

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: 19XX18/789V Date: 3-12-13 Time: 1600

**Landowner**

Name: Merit Energy  
Address \_\_\_\_\_  
Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW  
SEC 18  
TWN 53  
RNG 67

Picture #(s) \_\_\_\_\_

Industrial ☒  
**Stock** \_\_\_\_\_

**Domestic** \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P67747W/

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.54

Cond. 3110

Temp. °C 10.7

Turbidity (ntu) 5.46

D.O. (mg/L) 3.30

D.O. (%) 30.6

Water Level (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: Water clear - fizzy - no odor - 7  
sample bottles - 4.14

LCF

COC # 150250

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: 228-19 Date: 3/12/13 Time: 1645

**Landowner**

Name: Merit Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE NW

SEC 19

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

~~IND.~~  
~~Stock~~ ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50917W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.75

Cond. 2600

Temp. °C 10.4

Turbidity (ntu) 0.34

D.O. (mg/L) 1.44

D.O. (%) 13.5

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water Clear - Fizzy - no odor - 7  
sample bottles

LCF  
COC# 150250

**WWC ENGINEERING**  
**LANDOWNER WATER SAMPLING FORM**  
**For Strata Energy**

ER Addendum 3.4-K  
March 2015

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: CSWELL 01 Date: 3/13/13 Time: 10 30

**Landowner**

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr nwnw

SEC 20

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P132537W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.23

Cond. 1627

Temp. °C 8.8

Turbidity (ntu) 0.08

D.O. (mg/L) 1.58

Water Level (ft): \_\_\_\_\_

D.O. (%) 14.0

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles

LCF  
COC# 150250

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: CSWELLO3 Date: 3-13-13 Time: 1110

**Landowner**

Name: Strong/Otwell

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NENE

SEC 30

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P619W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.80

Cond. 675

Temp. °C 10.4

Turbidity (ntu) 0.38

D.O. (mg/L) 1.35

D.O. (%) 12.4

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC# 150250





No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

P22585P  
P21130P  
Name: P150688W Date: 2-5-13 Time: \_\_\_\_\_  
P22583P

Landowner

Name: Swanda

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): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments:

Wells: P22585P - well not functioning  
P21130P -  
P150688W - } Wells are winterized  
P22583P -

\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P75737W (M/S) Date: 1-24-13 Time: \_\_\_\_\_  
P65808W (Industria)

Landowner Name: Whiting Oil and Gas Legal Location Qtr/Qtr \_\_\_\_\_  
Address \_\_\_\_\_ SEC \_\_\_\_\_  
Phone# \_\_\_\_\_ TWN \_\_\_\_\_  
RNG \_\_\_\_\_

Picture #(s) \_\_\_\_\_ Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_ Permit No. \_\_\_\_\_

Location (Decimal Degrees) Water Quality  
Lat \_\_\_\_\_ pH \_\_\_\_\_  
Long \_\_\_\_\_ Cond. \_\_\_\_\_  
Elev. \_\_\_\_\_ Temp. ° C \_\_\_\_\_  
Turbidity (ntu) \_\_\_\_\_  
D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_ % Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_ Ambient Air Temp: \_\_\_\_\_

Comments: P75737W - Not used  
P65808W - Not functioning - pump  
burned up.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P17177W Date: 2-7-13 Time: 1145

**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: \_\_\_\_\_

Permit No. P17177W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.36

Cond. 876

Temp. °C 8.2

Turbidity (ntu) 0.45

D.O. (mg/L) 1.73

Water Level (ft): \_\_\_\_\_

D.O. (%) 15.3

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water Clear - no odor - 7 sample  
bottles - 4.14 - ImL Quote # 356

LCF

COC# 131188

**WWC ENGINEERING**  
**LANDOWNER WATER SAMPLING FORM**  
**For Strata Energy**

Name: SBWELLO2 Date: 3/14/13 Time: 1640

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NESE

SEC 1

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.72

Cond. 1008

Temp. °C 9.7

Turbidity (ntu) 0.31

D.O. (mg/L) 1.50

D.O. (%) 13.6

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

\_\_\_\_\_

\_\_\_\_\_

LCF

COC # 143949

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P84 665 W Date: 3/14/13 Time: 1430

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW21W

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P84665W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.21

Cond. 1113

Temp. °C 9.1

Turbidity (ntu) 0.85

D.O. (mg/L) 2.95

D.O. (%) 26.6

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water Clear - no odor - 7 sample  
bottles - 4.14

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

LCF

COC# 148999

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P50113W Date: 2-7-13 Time: 1115

**Landowner**

Name: Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SWNE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P50113W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.46

Cond. 1558

Temp. °C 8.7

Turbidity (ntu) 0.91

D.O. (mg/L) 2.08

Water Level (ft): \_\_\_\_\_

D.O. (%) 18.5

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14 - Quote 356

LCF

COC# 131188

**WWC ENGINEERING**  
**LANDOWNER WATER SAMPLING FORM**  
**For Strata Energy**

Name: SBWELLO1 Date: 3/14/13 Time: 1510

**Landowner**

Name: \_\_\_\_\_

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr N E S E

SEC 1

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.78

Cond. 1188

Temp. ° C 10.0

Turbidity (ntu) 0.25

D.O. (mg/L) 2.27

Water Level (ft): \_\_\_\_\_

D.O. (%) 21.2

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC # 148999

*\* Field Duplicate*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: FD5BWELL01 Date: 3/14/13 Time: 1520

**Landowner**

Name: \_\_\_\_\_

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 8.77

Cond. 1184

Temp. °C 10.6

Turbidity (ntu) 0.16

D.O. (mg/L) 2.48

D.O. (%) 22.6

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Field Duplicate

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
COC# 143949



WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P71108W (RAW) Date: 3/14/13 Time: 1600

**Landowner**

Name: Burck

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SENE

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P71108W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.34

Cond. 1557

Temp. °C 7.3

Turbidity (ntu) 0.15

D.O. (mg/L) 1.68

D.O. (%) 15.0

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Water Clear - no odor - 7 sample  
bottles - 4.14

LCF  
COC# 143949

**WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY**

Name: ABWELL01 Date: 1-23-13 Time: 1300

**Landowner**

Name: Austin Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SESW

SEC 2

TWN 53

RNG 6B

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. ?

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.88

Cond. 1586

Temp. °C 7.6

Turbidity (ntu) 2.02

D.O. (mg/L) 1.43 / 12.5

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: \_\_\_\_\_

Comments: Austin's new house well - water  
clear - no odor - 7 sample bottles -  
4.14

Send results to: Austin Burch

LCF

COC #131187

*\* No Sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: TW WELLO3 Date: 3/13/13 Time: —

Landowner

Name: Wesley

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SESE

SEC 12

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P192896W

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 winterized - not operational (3)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P42868W, P55196W Date: 1-23-13 Time: \_\_\_\_\_  
P20521W

**Landowner**

Name: Hahn

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: Wells not functioning or shut  
down for winter per phone conversation  
with Helen Hahn 1-23-13 @ 10:20  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WWC ENGINEERING**  
**LANDOWNER WATER SAMPLING FORM**  
**For Strata Energy**

K:\WWC\ADM\FORMS\Landowner Water Sampling Form Strata Specific2.doc  
ER Addendum 3.4-K  
March 2015

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61006W Date: 1-23-13 Time: 1100

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61006W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.10

Cond. 1049

Temp. °C 4.7

Turbidity (ntu) 31.4

D.O. (mg/L) 2.69 / 21.3

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: ~20°F

Comments: Sample collected at frost free hydrant  
north of Tim & Helena house. - water  
slightly turbid (light yellow/brown - no  
odor - 7 sample bottles - 4.14

LCF

COC # 131187

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P61007W Date: 1-23-13 Time: 1130

**Landowner**

Name: HAHN

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW SW

SEC 15

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P61007W

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 8.65

Cond. 1100

Temp. °C 4.1

Turbidity (ntu) 8.06

D.O. (mg/L) 3.09/25.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: —

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: 28°F

Comments: Water clear - no odor - 7 sample  
bottles - 4.14 - collected sample at frost  
free hydrant by white house

LCF  
COC # 131187

\* no sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM

Name: P22582P / P50883W For Strata Energy  
P68906W / P21128W Date: 2-6-13 Time: \_\_\_\_\_  
P144030W

Landowner

Name: Swanda

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): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: P22582P

P68906W

P144030W

P50883W

P21128W

} ALL wells winterized



\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P50883W Date: 3-13-13 Time: —

Landowner

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr NWNE

SEC 24

TWN 53

RNG 68

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 winterized - not operational (3)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P21128P Date: 3/13/13 Time: \_\_\_\_\_

Landowner

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SESW

SEC 24

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P21128P

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH \_\_\_\_\_

Cond. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: Well winterized - not operational (3)

No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

P22585P  
P21130P  
Name: P150688W Date: 2-5-13 Time: \_\_\_\_\_  
P22583P

Landowner

Name: Swanda  
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) \_\_\_\_\_  
D.O. (%) \_\_\_\_\_  
ORP (mV) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: \_\_\_\_\_

Wells: P22585P - well not functioning  
P21130P -  
P150688W - } Wells are winterized  
P22583P -  
\_\_\_\_\_  
\_\_\_\_\_

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For STRATA ENERGY

Name: P22584P Date: 1-24-13 Time: 1130

**Landowner**

Name: Strata Energy

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr SE SE

SEC 25

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P22584P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 9.52

Cond. 1131

Temp. °C 9.6

Turbidity (ntu) 3.42

D.O. (mg/L) 4.50 / 41.0

Water Level (ft): \_\_\_\_\_

% Combustible Gas: \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Ambient Air Temp: ~ 20°F

Comments: Strata Energy field office -  
water clear - no odor - 7 sample  
bottles - 4.14

LCF  
COCH

**WWC ENGINEERING**  
**LANDOWNER WATER SAMPLING FORM**  
**For Strata Energy**

K:\WWC\ADM\FORMS\Landowner Water Sampling Form Strata Specific2.doc  
ER Addendum 3.4-K  
March 2015

\* No Sample

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P58963W  
P58961W Date: 2-5-13 Time: \_\_\_\_\_

**Landowner**

Name: Evans

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): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: No sample from well P58963W  
due to well winterized and well  
P58961W due to well not functioning.



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-004  
**ClientSample ID:** P3177OW  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 2:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.87	s.u.			Field	01/23/2013 1400
Conductivity	3280	µmhos/cm			Field	01/23/2013 1400
Dissolved Oxygen	2.06	mg/L			Field	01/23/2013 1400
Dissolved Oxygen (pct)	17.3	%			Field	01/23/2013 1400
Turbidity	1.43	NTU			Field	01/23/2013 1400
Temperature	6.1	°C			Field	01/23/2013 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	487	mg/L		5	SM 2320B	01/25/2013 1443 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	577	mg/L		5	SM 2320B	01/25/2013 1443 KV
Alkalinity, Carbonate as CO <sub>3</sub>	8	mg/L		5	SM 2320B	01/25/2013 1443 KV
Chloride	23	mg/L		1	EPA 300.0	01/28/2013 1528 KB
Fluoride	0.2	mg/L		0.1	SM 4500FC	01/25/2013 1443 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	01/25/2013 1535 RH
Sulfate	887	mg/L		1	EPA 300.0	01/28/2013 1528 KB
Calcium	61	mg/L		1	EPA 200.7	01/25/2013 1345 DG
Magnesium	26	mg/L		1	EPA 200.7	01/25/2013 1345 DG
Potassium	16	mg/L		1	EPA 200.7	01/25/2013 1345 DG
Sodium	588	mg/L		1	EPA 200.7	01/25/2013 1345 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	01/28/2013 1005 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	01/25/2013 1443 KV
Electrical Conductivity	2630	µmhos/cm		5	SM 2510B	01/25/2013 1443 KV
Total Dissolved Solids (180)	1930	mg/L		10	SM 2540	01/25/2013 918 JCG
<b>Data Quality</b>						
Cation Sum	31.15	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Anion Sum	28.88	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Cation-Anion Balance (± 5%)	3.78	%		0.01	SM 1030E	02/11/2013 1026 SL
Solids, Total Dissolved (Calc)	1890	mg/L		10	SM 1030E	02/11/2013 1026 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

*Wade Nieuwsma*  
Wade Nieuwsma, Assistant Laboratory Manager

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1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

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**Lab ID:** S1301303-004  
**ClientSample ID:** P3177OW  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 2:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	01/25/2013 1345	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	01/25/2013 1318	MS
Barium	ND	mg/L		0.5	EPA 200.8	01/25/2013 1318	MS
Boron	0.4	mg/L		0.1	EPA 200.7	01/25/2013 1345	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	01/25/2013 1318	MS
Chromium	ND	mg/L		0.01	EPA 200.7	01/25/2013 1345	DG
Copper	ND	mg/L		0.01	EPA 200.8	01/25/2013 1318	MS
Iron	1.40	mg/L		0.05	EPA 200.7	01/25/2013 1345	DG
Lead	ND	mg/L		0.02	EPA 200.8	01/25/2013 1318	MS
Mercury	ND	mg/L		0.001	EPA 245.1	01/31/2013 1039	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	01/25/2013 1318	MS
Nickel	ND	mg/L		0.01	EPA 200.7	01/25/2013 1345	DG
Selenium	ND	mg/L		0.005	EPA 200.8	01/25/2013 1318	MS
Silver	ND	mg/L		0.003	EPA 200.8	01/25/2013 1318	MS
Uranium	0.0026	mg/L		0.0003	EPA 200.8	01/25/2013 1318	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	01/25/2013 1318	MS
Zinc	0.02	mg/L		0.01	EPA 200.7	01/25/2013 1345	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	01/29/2013 1339	MS
<b>Metals - Total</b>							
Iron	2.15	mg/L		0.05	EPA 200.7	01/29/2013 1800	DG
Manganese	0.18	mg/L		0.02	EPA 200.7	01/29/2013 1800	DG

## These results apply only to the samples tested.

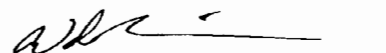
## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

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Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-004  
**ClientSample ID:** P3177OW  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 2:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		4	SM 7110B	02/11/2013 944 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	02/11/2013 944 SH
Gross Beta	10.6	pCi/L		7	SM 7110B	02/11/2013 944 SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	02/11/2013 944 SH
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000 SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 902 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 902 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	02/05/2013 1558 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/05/2013 1558 SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/18/2013 1953 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/18/2013 1953 MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/04/2013 1457 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/04/2013 1457 MB
Thorium 229 Tracer (30-120)	68.2	pCi/L			ACW10	02/04/2013 1457 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000 SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 1044 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 1044 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/13/2013 850 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/13/2013 850 SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924 MB
Thorium 229 Tracer (30-120)	79.5	pCi/L			ACW10	02/06/2013 924 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

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- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-005  
**ClientSample ID:** TDWELL01  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 3:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.30	s.u.			Field	01/23/2013 1500
Conductivity	1025	µmhos/cm			Field	01/23/2013 1500
Dissolved Oxygen	3.67	mg/L			Field	01/23/2013 1500
Dissolved Oxygen (pct)	32.1	%			Field	01/23/2013 1500
Turbidity	0.55	NTU			Field	01/23/2013 1500
Temperature	8.0	°C			Field	01/23/2013 1500
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	477	mg/L		5	SM 2320B	01/25/2013 1457 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	582	mg/L		5	SM 2320B	01/25/2013 1457 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	01/25/2013 1457 KV
Chloride	11	mg/L		1	EPA 300.0	01/28/2013 1539 KB
Fluoride	0.2	mg/L		0.1	SM 4500FC	01/25/2013 1457 KV
Nitrogen, Nitrate+Nitrite (as N)	0.6	mg/L		0.1	EPA 353.2	01/25/2013 1536 RH
Sulfate	163	mg/L		1	EPA 300.0	01/28/2013 1539 KB
Calcium	108	mg/L		1	EPA 200.7	01/25/2013 1349 DG
Magnesium	56	mg/L		1	EPA 200.7	01/25/2013 1349 DG
Potassium	3	mg/L		1	EPA 200.7	01/25/2013 1349 DG
Sodium	60	mg/L		1	EPA 200.7	01/25/2013 1349 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	01/28/2013 1007 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	01/25/2013 1457 KV
Electrical Conductivity	1060	µmhos/cm		5	SM 2510B	01/25/2013 1457 KV
Total Dissolved Solids (180)	690	mg/L		10	SM 2540	01/25/2013 919 JCG
<b>Data Quality</b>						
Cation Sum	12.70	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Anion Sum	13.30	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Cation-Anion Balance (± 5%)	2.28	%		0.01	SM 1030E	02/11/2013 1026 SL
Solids, Total Dissolved (Calc)	690	mg/L		10	SM 1030E	02/11/2013 1026 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-005  
**ClientSample ID:** TDWELL01  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 3:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	01/25/2013 1349	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	01/25/2013 1323	MS
Barium	ND	mg/L		0.5	EPA 200.8	01/25/2013 1323	MS
Boron	0.1	mg/L		0.1	EPA 200.7	01/25/2013 1349	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	01/25/2013 1323	MS
Chromium	ND	mg/L		0.01	EPA 200.7	01/25/2013 1349	DG
Copper	ND	mg/L		0.01	EPA 200.8	01/25/2013 1323	MS
Iron	ND	mg/L		0.05	EPA 200.7	01/25/2013 1349	DG
Lead	ND	mg/L		0.02	EPA 200.8	01/25/2013 1323	MS
Mercury	ND	mg/L		0.001	EPA 245.1	01/31/2013 1045	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	01/25/2013 1323	MS
Nickel	ND	mg/L		0.01	EPA 200.7	01/25/2013 1349	DG
Selenium	0.013	mg/L		0.005	EPA 200.8	01/25/2013 1323	MS
Silver	ND	mg/L		0.003	EPA 200.8	01/25/2013 1323	MS
Uranium	0.0168	mg/L		0.0003	EPA 200.8	01/25/2013 1323	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	01/25/2013 1323	MS
Zinc	0.02	mg/L		0.01	EPA 200.7	01/25/2013 1349	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	01/29/2013 1344	MS
<b>Metals - Total</b>							
Iron	0.05	mg/L		0.05	EPA 200.7	01/29/2013 1809	DG
Manganese	ND	mg/L		0.02	EPA 200.7	01/29/2013 1809	DG

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-005  
**ClientSample ID:** TDWELL01  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 3:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	13.4	pCi/L		2	SM 7110B	02/11/2013 944	SH
Gross Alpha Precision (±)	2.3	pCi/L			SM 7110B	02/11/2013 944	SH
Gross Beta	5.7	pCi/L		4	SM 7110B	02/11/2013 944	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	02/11/2013 944	SH
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 902	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 902	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	02/05/2013 1558	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/05/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/18/2013 2254	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/18/2013 2254	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924	MB
Thorium 229 Tracer (30-120)	67.6	pCi/L			ACW10	02/06/2013 924	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	3.1	pCi/L		1	OTW01	02/13/2013 1044	SH
Polonium 210 Precision (±)	1.1	pCi/L			OTW01	02/13/2013 1044	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/13/2013 850	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/13/2013 850	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924	MB
Thorium 229 Tracer (30-120)	69.4	pCi/L			ACW10	02/06/2013 924	MB

## These results apply only to the samples tested.

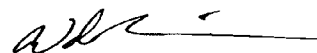
## RL - Reporting Limit

**Qualifiers:**

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Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-005  
**ClientSample ID:** P1440W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 2:30:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.39	s.u.			Field	02/07/2013 1430
Conductivity	1317	µmhos/cm			Field	02/07/2013 1430
Dissolved Oxygen	1.50	mg/L			Field	02/07/2013 1430
Dissolved Oxygen (pct)	14.5	%			Field	02/07/2013 1430
Turbidity	1.82	NTU			Field	02/07/2013 1430
Temperature	11.8	°C			Field	02/07/2013 1430
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	400	mg/L		5	SM 2320B	02/08/2013 2206 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	415	mg/L		5	SM 2320B	02/08/2013 2206 KV
Alkalinity, Carbonate as CO <sub>3</sub>	36	mg/L		5	SM 2320B	02/08/2013 2206 KV
Chloride	6	mg/L		1	EPA 300.0	02/13/2013 008 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	02/08/2013 2206 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1451 RH
Sulfate	243	mg/L		1	EPA 300.0	02/13/2013 008 AMB
Calcium	2	mg/L		1	EPA 200.7	02/11/2013 1200 DG
Magnesium	ND	mg/L		1	EPA 200.7	02/11/2013 1200 DG
Potassium	2	mg/L		1	EPA 200.7	02/11/2013 1200 DG
Sodium	307	mg/L		1	EPA 200.7	02/11/2013 1200 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	02/08/2013 1151 RH
Silica as SiO <sub>2</sub>	8.5	mg/L		0.1	EPA 200.7	02/11/2013 1200 DG
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	02/08/2013 2206 KV
Electrical Conductivity	1320	µmhos/cm		5	SM 2510B	02/08/2013 2206 KV
Total Dissolved Solids (180)	1040	mg/L		10	SM 2540	02/08/2013 1708 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/08/2013 954 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1451 RH
Sodium Adsorption Ratio	55.4			0.1	Calculation	02/21/2013 1237 SL

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-005  
**ClientSample ID:** P1440W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 2:30:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	13.52	meq/L		0.01	SM 1030E	02/21/2013 1237	SL
Anion Sum	13.23	meq/L		0.01	SM 1030E	02/21/2013 1237	SL
Cation-Anion Balance (± 5%)	1.10	%		0.01	SM 1030E	02/21/2013 1237	SL
Solids, Total Dissolved (Calc)	810	mg/L		10	SM 1030E	02/21/2013 1237	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	02/11/2013 1200	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	02/11/2013 1617	MS
Barium	ND	mg/L		0.5	EPA 200.8	02/11/2013 1617	MS
Boron	0.1	mg/L		0.1	EPA 200.7	02/11/2013 1200	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	02/11/2013 1617	MS
Chromium	ND	mg/L		0.01	EPA 200.7	02/11/2013 1200	DG
Copper	ND	mg/L		0.01	EPA 200.8	02/11/2013 1617	MS
Iron	ND	mg/L		0.05	EPA 200.7	02/11/2013 1200	DG
Lead	ND	mg/L		0.02	EPA 200.8	02/11/2013 1617	MS
Manganese	ND	mg/L		0.02	EPA 200.7	02/11/2013 1200	DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1009	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	02/11/2013 1617	MS
Nickel	ND	mg/L		0.01	EPA 200.7	02/11/2013 1200	DG
Selenium	ND	mg/L		0.005	EPA 200.8	02/11/2013 1617	MS
Silver	ND	mg/L		0.003	EPA 200.8	02/11/2013 1617	MS
Uranium	0.0051	mg/L		0.0003	EPA 200.8	02/11/2013 1617	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	02/11/2013 1617	MS
Zinc	ND	mg/L		0.01	EPA 200.7	02/11/2013 1200	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	02/11/2013 2231	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	02/12/2013 1828	DG
Manganese	ND	mg/L		0.02	EPA 200.7	02/12/2013 1828	DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1145	CS

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-005  
**ClientSample ID:** P1440W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 2:30:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	12.2	pCi/L		2	SM 7110B	02/25/2013 1758	SH
Gross Alpha Precision (±)	2.2	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Beta	4.0	pCi/L		3	SM 7110B	02/25/2013 1758	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	03/22/2013 2131	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	03/22/2013 2131	SH
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	0.5	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/20/2013 503	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/20/2013 503	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/21/2013 837	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/21/2013 837	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1458	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1458	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/22/2013 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/22/2013 817	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-006  
**ClientSample ID:** P150187W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 3:00:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	10.26	s.u.			Field	02/07/2013 1500
Conductivity	1899	µmhos/cm			Field	02/07/2013 1500
Dissolved Oxygen	2.73	mg/L			Field	02/07/2013 1500
Dissolved Oxygen (pct)	25.4	%			Field	02/07/2013 1500
Turbidity	2.11	NTU			Field	02/07/2013 1500
Temperature	8.8	°C			Field	02/07/2013 1500
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	407	mg/L		5	SM 2320B	02/18/2013 1531 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	310	mg/L		5	SM 2320B	02/18/2013 1531 KV
Alkalinity, Carbonate as CO <sub>3</sub>	92	mg/L		5	SM 2320B	02/18/2013 1531 KV
Chloride	41	mg/L		1	EPA 300.0	02/19/2013 1116 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	02/08/2013 2218 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1452 RH
Sulfate	441	mg/L		1	EPA 300.0	02/19/2013 1116 AMB
Calcium	3	mg/L		1	EPA 200.7	02/19/2013 1246 DG
Magnesium	ND	mg/L		1	EPA 200.7	02/19/2013 1246 DG
Potassium	2	mg/L		1	EPA 200.7	02/11/2013 1205 DG
Sodium	464	mg/L		1	EPA 200.7	02/11/2013 1205 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	02/08/2013 1152 RH
Silica as SiO <sub>2</sub>	2.8	mg/L		0.1	EPA 200.7	02/11/2013 1202 DG
<b>General Parameters</b>						
pH	9.5	s.u.		0.1	SM 4500 H B	02/08/2013 2218 KV
Electrical Conductivity	1940	µmhos/cm		5	SM 2510B	02/08/2013 2218 KV
Total Dissolved Solids (180)	1580	mg/L		10	SM 2540	02/08/2013 1709 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/08/2013 955 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1452 RH
Sodium Adsorption Ratio	69.4			0.1	Calculation	02/21/2013 1237 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-006  
**ClientSample ID:** P150187W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 3:00:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	20.44	meq/L		0.01	SM 1030E	02/21/2013 1237 SL
Anion Sum	18.51	meq/L		0.01	SM 1030E	02/21/2013 1237 SL
Cation-Anion Balance (± 5%)	4.95	%		0.01	SM 1030E	02/21/2013 1237 SL
Solids, Total Dissolved (Calc)	1200	mg/L		10	SM 1030E	02/21/2013 1237 SL
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	02/11/2013 1202 DG
Arsenic	0.005	mg/L		0.005	EPA 200.8	02/11/2013 1632 MS
Barium	ND	mg/L		0.5	EPA 200.8	02/11/2013 1632 MS
Boron	0.3	mg/L		0.1	EPA 200.7	02/11/2013 1202 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	02/11/2013 1632 MS
Chromium	ND	mg/L		0.01	EPA 200.7	02/11/2013 1202 DG
Copper	ND	mg/L		0.01	EPA 200.8	02/11/2013 1632 MS
Iron	ND	mg/L		0.05	EPA 200.7	02/11/2013 1202 DG
Lead	ND	mg/L		0.02	EPA 200.8	02/11/2013 1632 MS
Manganese	0.02	mg/L		0.02	EPA 200.7	02/11/2013 1202 DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1014 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	02/11/2013 1632 MS
Nickel	ND	mg/L		0.01	EPA 200.7	02/11/2013 1202 DG
Selenium	ND	mg/L		0.005	EPA 200.8	02/11/2013 1632 MS
Silver	ND	mg/L		0.003	EPA 200.8	02/11/2013 1632 MS
Uranium	0.0004	mg/L		0.0003	EPA 200.8	02/11/2013 1632 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	02/11/2013 1632 MS
Zinc	ND	mg/L		0.01	EPA 200.7	02/11/2013 1202 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	02/11/2013 2235 MS
<b>Metals - Total</b>						
Iron	0.32	mg/L		0.05	EPA 200.7	02/12/2013 1830 DG
Manganese	0.02	mg/L		0.02	EPA 200.7	02/12/2013 1830 DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1148 CS

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-006  
**ClientSample ID:** P150187W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 3:00:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	02/25/2013 1758	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Beta	ND	pCi/L		3	SM 7110B	02/25/2013 1758	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	04/12/2013 920	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	04/12/2013 920	SH
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/20/2013 804	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/20/2013 804	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/21/2013 837	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/21/2013 837	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1458	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1458	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/22/2013 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/22/2013 817	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-001  
**ClientSample ID:** TWO1  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 11:00:00 AM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.90	s.u.			Field	03/14/2013 1100
Conductivity	2780	µmhos/cm			Field	03/14/2013 1100
Dissolved Oxygen	2.54	mg/L			Field	03/14/2013 1100
Dissolved Oxygen (pct)	23.0	%			Field	03/14/2013 1100
Turbidity	7.53	NTU			Field	03/14/2013 1100
Temperature	9.0	°C			Field	03/14/2013 1100
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	674	mg/L		5	SM 2320B	03/15/2013 2155 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	782	mg/L		5	SM 2320B	03/15/2013 2155 KV
Alkalinity, Carbonate as CO <sub>3</sub>	20	mg/L		5	SM 2320B	03/15/2013 2155 KV
Chloride	14	mg/L		1	EPA 300.0	03/27/2013 026 AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	03/15/2013 2155 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1457 RH
Sulfate	472	mg/L		1	EPA 300.0	03/15/2013 2034 AMB
Calcium	16	mg/L		1	EPA 200.7	03/25/2013 1756 DG
Magnesium	7	mg/L		1	EPA 200.7	03/25/2013 1756 DG
Potassium	11	mg/L		1	EPA 200.7	03/28/2013 855 DG
Sodium	563	mg/L		1	EPA 200.7	03/18/2013 1559 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	03/20/2013 1559 RH
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/15/2013 2155 KV
Electrical Conductivity	2160	µmhos/cm		5	SM 2510B	03/15/2013 2155 KV
Total Dissolved Solids (180)	1490	mg/L		10	SM 2540	03/16/2013 1456 JCG
<b>Data Quality</b>						
Cation Sum	26.19	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	23.72	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	4.94	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	1490	mg/L		10	SM 1030E	04/01/2013 1123 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-001  
**ClientSample ID:** TWO1  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 11:00:00 AM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1559 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1355 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1355 MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/18/2013 1559 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1355 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1559 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1355 MS
Iron	0.05	mg/L		0.05	EPA 200.7	03/18/2013 1559 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1355 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1130 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1355 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1559 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1355 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1355 MS
Uranium	0.0003	mg/L		0.0003	EPA 200.8	03/15/2013 1355 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1355 MS
Zinc	0.01	mg/L		0.01	EPA 200.7	03/18/2013 1559 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1516 MS
<b>Metals - Total</b>						
Iron	1.57	mg/L		0.05	EPA 200.7	03/19/2013 1405 DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/19/2013 1405 DG

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-001  
**ClientSample ID:** TWO1  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 11:00:00 AM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		4	SM 7110B	04/03/2013 2142	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Beta	10.2	pCi/L		7	SM 7110B	04/03/2013 2142	SH
Gross Beta Precision (±)	4.1	pCi/L			SM 7110B	04/03/2013 2142	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1144	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1144	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/28/2013 1239	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/28/2013 1239	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 845	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 845	MB
Thorium 229 Tracer (30-120)	59.4	pCi/L			ACW10	03/28/2013 845	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 1336	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 1336	MB
Thorium 229 Tracer (30-120)	49.5	pCi/L			ACW10	03/28/2013 1336	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-003  
**ClientSample ID:** HBWELL04  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 9:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.21	s.u.			Field	03/13/2013 910
Conductivity	1735	µmhos/cm			Field	03/13/2013 910
Dissolved Oxygen	2.79	mg/L			Field	03/13/2013 910
Dissolved Oxygen (pct)	24.1	%			Field	03/13/2013 910
Turbidity	0.30	NTU			Field	03/13/2013 910
Temperature	7.9	°C			Field	03/13/2013 910
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	375	mg/L		5	SM 2320B	03/14/2013 1911 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	457	mg/L		5	SM 2320B	03/14/2013 1911 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/14/2013 1911 KV
Chloride	19	mg/L		1	EPA 300.0	03/14/2013 2340 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/14/2013 1911 KV
Nitrogen, Nitrate+Nitrite (as N)	1.2	mg/L		0.1	EPA 353.2	03/15/2013 1400 RH
Sulfate	604	mg/L		1	EPA 300.0	03/14/2013 2340 AMB
Calcium	208	mg/L		1	EPA 200.7	03/15/2013 1207 BK
Magnesium	64	mg/L		1	EPA 200.7	03/15/2013 1207 BK
Potassium	8	mg/L		1	EPA 200.7	03/15/2013 1207 BK
Sodium	141	mg/L		1	EPA 200.7	03/15/2013 1207 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1458 RH
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	03/14/2013 1911 KV
Electrical Conductivity	1810	µmhos/cm		5	SM 2510B	03/20/2013 1730 KV
Total Dissolved Solids (180)	1430	mg/L		10	SM 2540	03/13/2013 1802 JCG
<b>Data Quality</b>						
Cation Sum	21.99	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Anion Sum	20.69	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Cation-Anion Balance (± 5%)	3.02	%		0.01	SM 1030E	04/03/2013 1418 WN
Solids, Total Dissolved (Calc)	1270	mg/L		10	SM 1030E	04/03/2013 1418 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-003  
**ClientSample ID:** HBWELL04  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 9:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1207	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1636	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1636	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/15/2013 1207	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1636	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1207	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1636	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1207	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1636	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1033	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1636	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1207	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1636	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1636	MS
Uranium	0.0359	mg/L		0.0003	EPA 200.8	03/14/2013 1636	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1636	MS
Zinc	0.06	mg/L		0.01	EPA 200.7	03/15/2013 1207	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1340	MS
<b>Metals - Total</b>							
Iron	0.09	mg/L		0.05	EPA 200.7	03/18/2013 2048	DG
Manganese	0.08	mg/L		0.02	EPA 200.7	03/18/2013 2048	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-003  
**ClientSample ID:** HBWELL04  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 9:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	23.2	pCi/L		3	SM 7110B	04/02/2013 2132	SH
Gross Alpha Precision (±)	3.9	pCi/L			SM 7110B	04/02/2013 2132	SH
Gross Beta	20.2	pCi/L		7	SM 7110B	04/02/2013 2132	SH
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	04/02/2013 2132	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 911	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 911	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1741	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1741	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/27/2013 1231	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/27/2013 1231	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 1418	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 1418	MB
Thorium 229 Tracer (30-120)	77.9	pCi/L			ACW10	03/26/2013 1418	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/27/2013 812	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/27/2013 812	MB
Thorium 229 Tracer (30-120)	78.2	pCi/L			ACW10	03/27/2013 812	MB

## These results apply only to the samples tested.

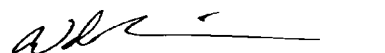
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-002  
**ClientSample ID:** TWO2  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 11:40:00 AM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.11	s.u.			Field	03/14/2013 1140
Conductivity	2620	µmhos/cm			Field	03/14/2013 1140
Dissolved Oxygen	1.25	mg/L			Field	03/14/2013 1140
Dissolved Oxygen (pct)	10.9	%			Field	03/14/2013 1140
Turbidity	0.39	NTU			Field	03/14/2013 1140
Temperature	8.2	°C			Field	03/14/2013 1140
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	695	mg/L		5	SM 2320B	03/15/2013 2205 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	800	mg/L		5	SM 2320B	03/15/2013 2205 KV
Alkalinity, Carbonate as CO <sub>3</sub>	24	mg/L		5	SM 2320B	03/15/2013 2205 KV
Chloride	7	mg/L		1	EPA 300.0	03/15/2013 2045 AMB
Fluoride	1.2	mg/L		0.1	SM 4500FC	03/15/2013 2205 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1458 RH
Sulfate	384	mg/L		1	EPA 300.0	03/15/2013 2045 AMB
Calcium	9	mg/L		1	EPA 200.7	03/18/2013 1601 DG
Magnesium	4	mg/L		1	EPA 200.7	03/18/2013 1601 DG
Potassium	7	mg/L		1	EPA 200.7	03/18/2013 1601 DG
Sodium	514	mg/L		1	EPA 200.7	03/18/2013 1601 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1600 RH
<b>General Parameters</b>						
pH	8.5	s.u.		0.1	SM 4500 H B	03/15/2013 2205 KV
Electrical Conductivity	2040	µmhos/cm		5	SM 2510B	03/15/2013 2205 KV
Total Dissolved Solids (180)	1400	mg/L		10	SM 2540	03/16/2013 1457 JCG
<b>Data Quality</b>						
Cation Sum	23.32	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	22.16	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	2.54	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	1340	mg/L		10	SM 1030E	04/01/2013 1123 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-002  
**ClientSample ID:** TWO2  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 11:40:00 AM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1601	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1424	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1424	MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/18/2013 1601	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1424	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1601	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1424	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/18/2013 1601	DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1424	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1138	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1424	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1601	DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1424	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1424	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1424	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1424	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/18/2013 1601	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1535	MS
<b>Metals - Total</b>							
Iron	0.07	mg/L		0.05	EPA 200.7	03/19/2013 1411	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/19/2013 1411	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-002  
**ClientSample ID:** TWO2  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 11:40:00 AM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	ND	pCi/L		3	SM 7110B	04/03/2013 2142 SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/03/2013 2142 SH
Gross Beta	9.8	pCi/L		7	SM 7110B	04/03/2013 2142 SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	04/03/2013 2142 SH
Lead 210	2.0	pCi/L		1	OTW01	04/02/2013 1144 SH
Lead 210 Precision (±)	1.0	pCi/L			OTW01	04/02/2013 1144 SH
Polonium 210	4.4	pCi/L		1	OTW01	04/01/2013 1850 SH
Polonium 210 Precision (±)	0.7	pCi/L			OTW01	04/01/2013 1850 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/25/2013 1541 SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/28/2013 1540 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/28/2013 1540 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 845 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 845 MB
Thorium 229 Tracer (30-120)	72.8	pCi/L			ACW10	03/28/2013 845 MB
<b>Radionuclides - Suspended</b>						
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215 SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000 SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 1336 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 1336 MB
Thorium 229 Tracer (30-120)	66.7	pCi/L			ACW10	03/28/2013 1336 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-003  
**ClientSample ID:** HBWELL05  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 12:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.52	s.u.			Field	03/14/2013 1230
Conductivity	1642	µmhos/cm			Field	03/14/2013 1230
Dissolved Oxygen	2.94	mg/L			Field	03/14/2013 1230
Dissolved Oxygen (pct)	27.1	%			Field	03/14/2013 1230
Turbidity	38.3	NTU			Field	03/14/2013 1230
Temperature	10.4	°C			Field	03/14/2013 1230
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	559	mg/L		5	SM 2320B	03/15/2013 2215 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	682	mg/L		5	SM 2320B	03/15/2013 2215 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/15/2013 2215 KV
Chloride	5	mg/L		1	EPA 300.0	03/15/2013 2057 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/15/2013 2215 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/27/2013 1505 RH
Sulfate	398	mg/L		1	EPA 300.0	03/15/2013 2057 AMB
Calcium	79	mg/L		1	EPA 200.7	03/18/2013 1604 DG
Magnesium	35	mg/L		1	EPA 200.7	03/18/2013 1604 DG
Potassium	11	mg/L		1	EPA 200.7	03/18/2013 1604 DG
Sodium	310	mg/L		1	EPA 200.7	03/18/2013 1604 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1606 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	03/15/2013 2215 KV
Electrical Conductivity	1690	µmhos/cm		5	SM 2510B	03/15/2013 2215 KV
Total Dissolved Solids (180)	1140	mg/L		10	SM 2540	03/16/2013 1458 JCG
<b>Data Quality</b>						
Cation Sum	20.60	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	19.61	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	2.47	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	1170	mg/L		10	SM 1030E	04/01/2013 1123 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-003  
**ClientSample ID:** HBWELL05  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 12:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1604 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1429 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1429 MS
Boron	0.2	mg/L		0.1	EPA 200.7	03/18/2013 1604 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1429 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1604 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1429 MS
Iron	1.08	mg/L		0.05	EPA 200.7	03/18/2013 1604 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1429 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1140 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1429 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1604 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1429 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1429 MS
Uranium	0.0113	mg/L		0.0003	EPA 200.8	03/15/2013 1429 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1429 MS
Zinc	0.01	mg/L		0.01	EPA 200.7	03/18/2013 1604 DG
<b>Metals - Suspended</b>						
Uranium	0.0004	mg/L		0.0003	EPA 200.8	03/18/2013 1540 MS
<b>Metals - Total</b>						
Iron	9.28	mg/L		0.05	EPA 200.7	03/19/2013 1413 DG
Manganese	0.10	mg/L		0.02	EPA 200.7	03/19/2013 1413 DG

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-003  
**ClientSample ID:** HBWELL05  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 12:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.1	pCi/L		4	SM 7110B	04/03/2013 2142	SH
Gross Alpha Precision (±)	3.1	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Beta	11.4	pCi/L		7	SM 7110B	04/03/2013 2142	SH
Gross Beta Precision (±)	4.4	pCi/L			SM 7110B	04/03/2013 2142	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1144	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1144	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/28/2013 1841	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/28/2013 1841	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 845	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 845	MB
Thorium 229 Tracer (30-120)	88.9	pCi/L			ACW10	03/28/2013 845	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.2	pCi/L		1	OTW01	04/03/2013 1215	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/03/2013 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/26/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 1336	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 1336	MB
Thorium 229 Tracer (30-120)	63.0	pCi/L			ACW10	03/28/2013 1336	MB

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## RL - Reporting Limit

**Qualifiers:**

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- L Analyzed by a contract laboratory
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-004  
**ClientSample ID:** FD-HBWELL05  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 1:00:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.47	s.u.			Field	03/14/2013 1300
Conductivity	1696	µmhos/cm			Field	03/14/2013 1300
Dissolved Oxygen	2.10	mg/L			Field	03/14/2013 1300
Dissolved Oxygen (pct)	18.9	%			Field	03/14/2013 1300
Turbidity	13.51	NTU			Field	03/14/2013 1300
Temperature	10.1	°C			Field	03/14/2013 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	555	mg/L		5	SM 2320B	03/15/2013 2226 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	677	mg/L		5	SM 2320B	03/15/2013 2226 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/15/2013 2226 KV
Chloride	5	mg/L		1	EPA 300.0	03/15/2013 2109 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/15/2013 2226 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/22/2013 1612 AMB
Sulfate	401	mg/L		1	EPA 300.0	03/15/2013 2109 AMB
Calcium	83	mg/L		1	EPA 200.7	03/18/2013 1606 DG
Magnesium	36	mg/L		1	EPA 200.7	03/18/2013 1606 DG
Potassium	10	mg/L		1	EPA 200.7	03/18/2013 1606 DG
Sodium	305	mg/L		1	EPA 200.7	03/18/2013 1606 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1607 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	03/15/2013 2226 KV
Electrical Conductivity	1680	µmhos/cm		5	SM 2510B	03/15/2013 2226 KV
Total Dissolved Solids (180)	1130	mg/L		10	SM 2540	03/16/2013 1459 JCG
<b>Data Quality</b>						
Cation Sum	20.66	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	19.59	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	2.64	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	1170	mg/L		10	SM 1030E	04/01/2013 1123 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

*[Signature]*  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-004  
**ClientSample ID:** FD-HBWELL05  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 1:00:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1606 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1434 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1434 MS
Boron	0.2	mg/L		0.1	EPA 200.7	03/18/2013 1606 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1434 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1606 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1434 MS
Iron	0.78	mg/L		0.05	EPA 200.7	03/18/2013 1606 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1434 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1142 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1434 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1606 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1434 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1434 MS
Uranium	0.0130	mg/L		0.0003	EPA 200.8	03/15/2013 1434 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1434 MS
Zinc	0.01	mg/L		0.01	EPA 200.7	03/18/2013 1606 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1545 MS
<b>Metals - Total</b>						
Iron	2.49	mg/L		0.05	EPA 200.7	03/19/2013 1416 DG
Manganese	0.10	mg/L		0.02	EPA 200.7	03/19/2013 1416 DG

**These results apply only to the samples tested.**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

**RL - Reporting Limit**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-004  
**ClientSample ID:** FD-HBWELL05  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 1:00:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	11.6	pCi/L		3	SM 7110B	04/03/2013 2142	SH
Gross Alpha Precision (±)	3.0	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Beta	ND	pCi/L		8	SM 7110B	04/03/2013 2142	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	04/03/2013 2142	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1144	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1144	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/04/2013 1137	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/04/2013 1137	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 845	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 845	MB
Thorium 229 Tracer (30-120)	63.0	pCi/L			ACW10	03/28/2013 845	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/29/2013 1132	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/29/2013 1132	MB
Thorium 229 Tracer (30-120)	70.4	pCi/L			ACW10	03/29/2013 1132	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

Page 12 of 30



## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-002  
**ClientSample ID:** ARH02  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 9:30:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.25	s.u.			Field	02/07/2013 930
Conductivity	2760	µmhos/cm			Field	02/07/2013 930
Dissolved Oxygen	3.77	mg/L			Field	02/07/2013 930
Dissolved Oxygen (pct)	31.90	%			Field	02/07/2013 930
Turbidity	1.61	NTU			Field	02/07/2013 930
Temperature	7.3	°C			Field	02/07/2013 930
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	374	mg/L		5	SM 2320B	02/08/2013 2117 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	456	mg/L		5	SM 2320B	02/08/2013 2117 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	02/08/2013 2117 KV
Chloride	14	mg/L		1	EPA 300.0	02/12/2013 2332 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	02/08/2013 2117 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1448 RH
Sulfate	860	mg/L		1	EPA 300.0	02/12/2013 2332 AMB
Calcium	191	mg/L		1	EPA 200.7	02/11/2013 1153 DG
Magnesium	92	mg/L		1	EPA 200.7	02/11/2013 1153 DG
Potassium	7	mg/L		1	EPA 200.7	02/11/2013 1153 DG
Sodium	224	mg/L		1	EPA 200.7	02/11/2013 1153 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	02/08/2013 1148 RH
Silica as SiO <sub>2</sub>	12.0	mg/L		0.1	EPA 200.7	02/11/2013 1153 DG
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	02/08/2013 2117 KV
Electrical Conductivity	1850	µmhos/cm		5	SM 2510B	02/08/2013 2117 KV
Total Dissolved Solids (180)	2030	mg/L		10	SM 2540	02/08/2013 1705 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/08/2013 951 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1448 RH
Sodium Adsorption Ratio	3.3			0.1	Calculation	02/21/2013 1237 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-002  
**ClientSample ID:** ARH02  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 9:30:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	26.99	meq/L		0.01	SM 1030E	02/21/2013 1237	SL
Anion Sum	25.80	meq/L		0.01	SM 1030E	02/21/2013 1237	SL
Cation-Anion Balance (± 5%)	2.25	%		0.01	SM 1030E	02/21/2013 1237	SL
Solids, Total Dissolved (Calc)	1620	mg/L		10	SM 1030E	02/21/2013 1237	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	02/11/2013 1153	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	02/11/2013 1603	MS
Barium	ND	mg/L		0.5	EPA 200.8	02/11/2013 1603	MS
Boron	0.2	mg/L		0.1	EPA 200.7	02/11/2013 1153	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	02/11/2013 1603	MS
Chromium	ND	mg/L		0.01	EPA 200.7	02/11/2013 1153	DG
Copper	ND	mg/L		0.01	EPA 200.8	02/11/2013 1603	MS
Iron	0.22	mg/L		0.05	EPA 200.7	02/11/2013 1153	DG
Lead	ND	mg/L		0.02	EPA 200.8	02/11/2013 1603	MS
Manganese	0.87	mg/L		0.02	EPA 200.7	02/11/2013 1153	DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 955	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	02/11/2013 1603	MS
Nickel	ND	mg/L		0.01	EPA 200.7	02/11/2013 1153	DG
Selenium	ND	mg/L		0.005	EPA 200.8	02/11/2013 1603	MS
Silver	ND	mg/L		0.003	EPA 200.8	02/11/2013 1603	MS
Uranium	0.0317	mg/L		0.0003	EPA 200.8	02/11/2013 1603	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	02/11/2013 1603	MS
Zinc	0.13	mg/L		0.01	EPA 200.7	02/11/2013 1153	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	02/11/2013 2206	MS
<b>Metals - Total</b>							
Iron	0.35	mg/L		0.05	EPA 200.7	02/12/2013 1816	DG
Manganese	0.80	mg/L		0.02	EPA 200.7	02/12/2013 1816	DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1132	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-002  
**ClientSample ID:** ARH02  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 9:30:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	20.4	pCi/L		2	SM 7110B	02/25/2013 1758	SH
Gross Alpha Precision (±)	3.5	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Beta	10.8	pCi/L		3	SM 7110B	02/25/2013 1758	SH
Gross Beta Precision (±)	3.5	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	03/21/2013 1524	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	03/21/2013 1524	SH
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1236	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1236	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 952	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 952	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/19/2013 2000	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/19/2013 2000	MK
Thorium 230	0.4	pCi/L		0.2	ACW10	02/21/2013 837	MB
Thorium 230 Precision (±)	0.2	pCi/L			ACW10	02/21/2013 837	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/22/2013 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/22/2013 817	MB

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-005  
**ClientSample ID:** DWWELL01  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 1:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.94	s.u.			Field	03/14/2013 1330
Conductivity	3050	µmhos/cm			Field	03/14/2013 1330
Dissolved Oxygen	1.36	mg/L			Field	03/14/2013 1330
Dissolved Oxygen (pct)	12.9	%			Field	03/14/2013 1330
Turbidity	4.22	NTU			Field	03/14/2013 1330
Temperature	10.9	°C			Field	03/14/2013 1330
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	520	mg/L		5	SM 2320B	03/15/2013 2236 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	608	mg/L		5	SM 2320B	03/15/2013 2236 KV
Alkalinity, Carbonate as CO <sub>3</sub>	13	mg/L		5	SM 2320B	03/15/2013 2236 KV
Chloride	8	mg/L		1	EPA 300.0	03/15/2013 2219 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	03/15/2013 2236 KV
Nitrogen, Nitrate+Nitrite (as N)	0.1	mg/L		0.1	EPA 353.2	03/22/2013 1613 AMB
Sulfate	704	mg/L		1	EPA 300.0	03/15/2013 2219 AMB
Calcium	28	mg/L		1	EPA 200.7	03/18/2013 1608 DG
Magnesium	14	mg/L		1	EPA 200.7	03/18/2013 1608 DG
Potassium	16	mg/L		1	EPA 200.7	03/18/2013 1608 DG
Sodium	523	mg/L		1	EPA 200.7	03/18/2013 1608 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/20/2013 1608 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	03/15/2013 2236 KV
Electrical Conductivity	2370	µmhos/cm		5	SM 2510B	03/15/2013 2236 KV
Total Dissolved Solids (180)	1670	mg/L		10	SM 2540	03/16/2013 1500 JCG
<b>Data Quality</b>						
Cation Sum	25.76	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	25.31	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	0.89	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	1610	mg/L		10	SM 1030E	04/01/2013 1123 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
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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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-005  
**ClientSample ID:** DWWELL01  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 1:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1608 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1439 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1439 MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/18/2013 1608 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1439 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1608 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1439 MS
Iron	0.97	mg/L		0.05	EPA 200.7	03/18/2013 1608 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1439 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1144 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1439 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1608 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1439 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1439 MS
Uranium	0.0078	mg/L		0.0003	EPA 200.8	03/15/2013 1439 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1439 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/18/2013 1608 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1600 MS
<b>Metals - Total</b>						
Iron	1.94	mg/L		0.05	EPA 200.7	03/19/2013 1418 DG
Manganese	0.03	mg/L		0.02	EPA 200.7	03/19/2013 1418 DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-005  
**ClientSample ID:** DWWELL01  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 1:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	31.2	pCi/L		5	SM 7110B	04/03/2013 2142 SH
Gross Alpha Precision (±)	5.1	pCi/L			SM 7110B	04/03/2013 2142 SH
Gross Beta	23.5	pCi/L		7	SM 7110B	04/03/2013 2142 SH
Gross Beta Precision (±)	4.7	pCi/L			SM 7110B	04/03/2013 2142 SH
Lead 210	1.8	pCi/L		1	OTW01	04/02/2013 1144 SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	04/02/2013 1144 SH
Polonium 210	6.9	pCi/L		1	OTW01	04/01/2013 1850 SH
Polonium 210 Precision (±)	1.2	pCi/L			OTW01	04/01/2013 1850 SH
Radium 226	3.6	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1745 SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	03/25/2013 1745 SH
Radium 228	ND	pCi/L		1	Ga-Tech	04/04/2013 1438 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/04/2013 1438 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 845 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 845 MB
Thorium 229 Tracer (30-120)	62.3	pCi/L			ACW10	03/28/2013 845 MB
<b>Radionuclides - Suspended</b>						
Lead 210	2.2	pCi/L		1	OTW01	04/03/2013 1215 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/03/2013 1215 SH
Polonium 210	4.1	pCi/L		1	OTW01	04/02/2013 1806 SH
Polonium 210 Precision (±)	1.4	pCi/L			OTW01	04/02/2013 1806 SH
Radium 226	1.3	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000 SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	03/26/2013 000 SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/29/2013 1132 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/29/2013 1132 MB
Thorium 229 Tracer (30-120)	30.5	pCi/L			ACW10	03/29/2013 1132 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

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- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-001  
**ClientSample ID:** 19XX18/789V  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/12/2013 4:00:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.54	s.u.			Field	03/12/2013 1600
Conductivity	3110	µmhos/cm			Field	03/12/2013 1600
Dissolved Oxygen	3.30	mg/L			Field	03/12/2013 1600
Dissolved Oxygen (pct)	30.6	%			Field	03/12/2013 1600
Turbidity	5.46	NTU			Field	03/12/2013 1600
Temperature	10.7	°C			Field	03/12/2013 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	545	mg/L		5	SM 2320B	03/14/2013 1847 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	601	mg/L		5	SM 2320B	03/14/2013 1847 KV
Alkalinity, Carbonate as CO <sub>3</sub>	31	mg/L		5	SM 2320B	03/14/2013 1847 KV
Chloride	10	mg/L		1	EPA 300.0	03/14/2013 2317 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	03/14/2013 1847 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/15/2013 1357 RH
Sulfate	693	mg/L		1	EPA 300.0	03/14/2013 2317 AMB
Calcium	8	mg/L		1	EPA 200.7	03/15/2013 1203 BK
Magnesium	3	mg/L		1	EPA 200.7	03/15/2013 1203 BK
Potassium	5	mg/L		1	EPA 200.7	03/15/2013 1203 BK
Sodium	612	mg/L		1	EPA 200.7	03/15/2013 1203 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/20/2013 1456 RH
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	03/14/2013 1847 KV
Electrical Conductivity	2540	µmhos/cm		5	SM 2510B	03/20/2013 1715 KV
Total Dissolved Solids (180)	1810	mg/L		10	SM 2540	03/13/2013 1800 JCG
<b>Data Quality</b>						
Cation Sum	27.38	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Anion Sum	25.61	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Cation-Anion Balance (± 5%)	3.33	%		0.01	SM 1030E	04/03/2013 1418 WN
Solids, Total Dissolved (Calc)	1660	mg/L		10	SM 1030E	04/03/2013 1418 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-001  
**ClientSample ID:** 19XX18/789V  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/12/2013 4:00:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1203	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1626	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1626	MS
Boron	0.5	mg/L		0.1	EPA 200.7	03/15/2013 1203	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1626	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1203	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1626	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1203	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1626	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1108	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1626	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1203	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1626	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1626	MS
Uranium	0.0864	mg/L		0.0003	EPA 200.8	03/14/2013 1626	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1626	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1203	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1330	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/18/2013 2044	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/18/2013 2044	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-001  
**ClientSample ID:** 19XX18/789V  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/12/2013 4:00:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Radionuclides - Dissolved</b>						
Gross Alpha	259	pCi/L		4	SM 7110B	04/02/2013 2132 SH
Gross Alpha Precision (±)	12	pCi/L			SM 7110B	04/02/2013 2132 SH
Gross Beta	77.0	pCi/L		7	SM 7110B	04/02/2013 2132 SH
Gross Beta Precision (±)	5.6	pCi/L			SM 7110B	04/02/2013 2132 SH
Lead 210	4.5	pCi/L		1	OTW01	04/02/2013 911 SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	04/02/2013 911 SH
Polonium 210	2.3	pCi/L		1	OTW01	04/01/2013 1741 SH
Polonium 210 Precision (±)	0.8	pCi/L			OTW01	04/01/2013 1741 SH
Radium 226	41.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541 SH
Radium 226 Precision (±)	0.8	pCi/L			SM 7500 Ra-B	03/25/2013 1541 SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/26/2013 2219 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/26/2013 2219 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 955 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 955 MB
Thorium 229 Tracer (30-120)	97.0	pCi/L			ACW10	03/26/2013 955 MB
<b>Radionuclides - Suspended</b>						
Lead 210	2.2	pCi/L		1	OTW01	04/02/2013 1911 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 1911 SH
Polonium 210	4.5	pCi/L		1	OTW01	04/02/2013 1658 SH
Polonium 210 Precision (±)	1.4	pCi/L			OTW01	04/02/2013 1658 SH
Radium 226	0.7	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/26/2013 1123 SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/27/2013 812 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/27/2013 812 MB
Thorium 229 Tracer (30-120)	62.8	pCi/L			ACW10	03/27/2013 812 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-002  
**ClientSample ID:** 22X-19  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/12/2013 4:45:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.75	s.u.			Field	03/12/2013 1645
Conductivity	2600	µmhos/cm			Field	03/12/2013 1645
Dissolved Oxygen	1.44	mg/L			Field	03/12/2013 1645
Dissolved Oxygen (pct)	13.5	%			Field	03/12/2013 1645
Turbidity	0.34	NTU			Field	03/12/2013 1645
Temperature	10.4	°C			Field	03/12/2013 1645
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	517	mg/L		5	SM 2320B	03/20/2013 1728 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	586	mg/L		5	SM 2320B	03/20/2013 1728 KV
Alkalinity, Carbonate as CO <sub>3</sub>	22	mg/L		5	SM 2320B	03/20/2013 1728 KV
Chloride	17	mg/L		1	EPA 300.0	03/27/2013 048 AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	03/14/2013 1859 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/15/2013 1359 RH
Sulfate	555	mg/L		1	EPA 300.0	03/25/2013 2154 AMB
Calcium	5	mg/L		1	EPA 200.7	03/21/2013 1455 DG
Magnesium	2	mg/L		1	EPA 200.7	03/21/2013 1455 DG
Potassium	4	mg/L		1	EPA 200.7	03/21/2013 1455 DG
Sodium	564	mg/L		1	EPA 200.7	03/15/2013 1205 BK
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/20/2013 1457 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	03/14/2013 1859 KV
Electrical Conductivity	1960	µmhos/cm		5	SM 2510B	03/14/2013 1859 KV
Total Dissolved Solids (180)	1530	mg/L		10	SM 2540	03/13/2013 1801 JCG
<b>Data Quality</b>						
Cation Sum	25.02	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Anion Sum	22.38	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Cation-Anion Balance (± 5%)	5.55	%		0.01	SM 1030E	04/03/2013 1418 WN
Solids, Total Dissolved (Calc)	1460	mg/L		10	SM 1030E	04/03/2013 1418 WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-002  
**ClientSample ID:** 22X-19  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/12/2013 4:45:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1205 BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1631 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1631 MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/15/2013 1205 BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1631 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1205 BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1631 MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1205 BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1631 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1110 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1631 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1205 BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1631 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1631 MS
Uranium	0.0225	mg/L		0.0003	EPA 200.8	03/14/2013 1631 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1631 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1205 BK
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1335 MS
<b>Metals - Total</b>						
Iron	0.05	mg/L		0.05	EPA 200.7	03/18/2013 2046 DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/18/2013 2046 DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-002  
**ClientSample ID:** 22X-19  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/12/2013 4:45:00 PM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	52.6	pCi/L		4	SM 7110B	04/02/2013 2132	SH
Gross Alpha Precision (±)	5.7	pCi/L			SM 7110B	04/02/2013 2132	SH
Gross Beta	14.1	pCi/L		7	SM 7110B	04/02/2013 2132	SH
Gross Beta Precision (±)	4.2	pCi/L			SM 7110B	04/02/2013 2132	SH
Lead 210	1.3	pCi/L		1	OTW01	04/02/2013 911	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 911	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1741	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1741	SH
Radium 226	3.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/27/2013 420	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/27/2013 420	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 1418	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 1418	MB
Thorium 229 Tracer (30-120)	73.6	pCi/L			ACW10	03/26/2013 1418	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.5	pCi/L		1	OTW01	04/03/2013 1215	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/03/2013 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/27/2013 812	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/27/2013 812	MB
Thorium 229 Tracer (30-120)	86.6	pCi/L			ACW10	03/27/2013 812	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-004  
**ClientSample ID:** CSWELL01  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 10:30:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.23	s.u.			Field	03/13/2013 1030
Conductivity	1627	µmhos/cm			Field	03/13/2013 1030
Dissolved Oxygen	1.58	mg/L			Field	03/13/2013 1030
Dissolved Oxygen (pct)	14.0	%			Field	03/13/2013 1030
Turbidity	0.08	NTU			Field	03/13/2013 1030
Temperature	8.8	°C			Field	03/13/2013 1030
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	610	mg/L		5	SM 2320B	03/14/2013 1924 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	696	mg/L		5	SM 2320B	03/14/2013 1924 KV
Alkalinity, Carbonate as CO <sub>3</sub>	24	mg/L		5	SM 2320B	03/14/2013 1924 KV
Chloride	3	mg/L		1	EPA 300.0	03/15/2013 039 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	03/14/2013 1924 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/15/2013 1401 RH
Sulfate	256	mg/L		1	EPA 300.0	03/15/2013 039 AMB
Calcium	11	mg/L		1	EPA 200.7	03/21/2013 1513 DG
Magnesium	7	mg/L		1	EPA 200.7	03/21/2013 1513 DG
Potassium	8	mg/L		1	EPA 200.7	03/21/2013 1513 DG
Sodium	417	mg/L		1	EPA 200.7	03/15/2013 1210 BK
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	03/20/2013 1459 RH
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	03/14/2013 1924 KV
Electrical Conductivity	1470	µmhos/cm		5	SM 2510B	03/14/2013 1924 KV
Total Dissolved Solids (180)	1120	mg/L		10	SM 2540	03/13/2013 1803 JCG
<b>Data Quality</b>						
Cation Sum	19.42	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Anion Sum	17.62	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Cation-Anion Balance (± 5%)	4.84	%		0.01	SM 1030E	04/03/2013 1418 WN
Solids, Total Dissolved (Calc)	1070	mg/L		10	SM 1030E	04/03/2013 1418 WN

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-004  
**ClientSample ID:** CSWELL01  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 10:30:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1210	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1651	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1651	MS
Boron	0.4	mg/L		0.1	EPA 200.7	03/15/2013 1210	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1651	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1210	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1651	MS
Iron	ND	mg/L		0.05	EPA 200.7	03/15/2013 1210	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1651	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1041	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1651	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1210	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1651	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1651	MS
Uranium	0.0030	mg/L		0.0003	EPA 200.8	03/14/2013 1651	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1651	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1210	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1345	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	03/18/2013 2051	DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/18/2013 2051	DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-004  
**ClientSample ID:** CSWELL01  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 10:30:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Radionuclides - Dissolved

Gross Alpha	7.9	pCi/L		2	SM 7110B	04/02/2013 2132 SH
Gross Alpha Precision (±)	2.0	pCi/L			SM 7110B	04/02/2013 2132 SH
Gross Beta	8.3	pCi/L		7	SM 7110B	04/02/2013 2132 SH
Gross Beta Precision (±)	2.3	pCi/L			SM 7110B	04/02/2013 2132 SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 911 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 911 SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1741 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1741 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/25/2013 1541 SH
Radium 228	1.3	pCi/L		1	Ga-Tech	03/27/2013 1532 MK
Radium 228 Precision (±)	0.9	pCi/L			Ga-Tech	03/27/2013 1532 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 1418 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 1418 MB
Thorium 229 Tracer (30-120)	91.5	pCi/L			ACW10	03/26/2013 1418 MB

## Radionuclides - Suspended

Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215 SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123 SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/27/2013 812 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/27/2013 812 MB
Thorium 229 Tracer (30-120)	83.8	pCi/L			ACW10	03/27/2013 812 MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-005  
**ClientSample ID:** CSWELL03  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 11:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.80	s.u.			Field	03/13/2013 1110
Conductivity	675	µmhos/cm			Field	03/13/2013 1110
Dissolved Oxygen	1.35	mg/L			Field	03/13/2013 1110
Dissolved Oxygen (pct)	12.4	%			Field	03/13/2013 1110
Turbidity	0.38	NTU			Field	03/13/2013 1110
Temperature	10.4	°C			Field	03/13/2013 1110
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	346	mg/L		5	SM 2320B	03/14/2013 1936 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	400	mg/L		5	SM 2320B	03/14/2013 1936 KV
Alkalinity, Carbonate as CO <sub>3</sub>	11	mg/L		5	SM 2320B	03/14/2013 1936 KV
Chloride	3	mg/L		1	EPA 300.0	03/15/2013 051 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/14/2013 1936 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/15/2013 1402 RH
Sulfate	26	mg/L		1	EPA 300.0	03/15/2013 051 AMB
Calcium	20	mg/L		1	EPA 200.7	03/15/2013 1212 BK
Magnesium	10	mg/L		1	EPA 200.7	03/15/2013 1212 BK
Potassium	7	mg/L		1	EPA 200.7	03/15/2013 1212 BK
Sodium	130	mg/L		1	EPA 200.7	03/15/2013 1212 BK
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1500 RH
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	03/14/2013 1936 KV
Electrical Conductivity	645	µmhos/cm		5	SM 2510B	03/14/2013 1936 KV
Total Dissolved Solids (180)	440	mg/L		10	SM 2540	03/13/2013 1804 JCG
<b>Data Quality</b>						
Cation Sum	7.65	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Anion Sum	7.55	meq/L		0.01	SM 1030E	04/03/2013 1418 WN
Cation-Anion Balance (± 5%)	0.64	%		0.01	SM 1030E	04/03/2013 1418 WN
Solids, Total Dissolved (Calc)	400	mg/L		10	SM 1030E	04/03/2013 1418 WN

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-005  
**ClientSample ID:** CSWELL03  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 11:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	03/15/2013 1212	BK
Arsenic	ND	mg/L		0.005	EPA 200.8	03/14/2013 1656	MS
Barium	ND	mg/L		0.5	EPA 200.8	03/14/2013 1656	MS
Boron	ND	mg/L		0.1	EPA 200.7	03/15/2013 1212	BK
Cadmium	ND	mg/L		0.002	EPA 200.8	03/14/2013 1656	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/15/2013 1212	BK
Copper	ND	mg/L		0.01	EPA 200.8	03/14/2013 1656	MS
Iron	0.50	mg/L		0.05	EPA 200.7	03/15/2013 1212	BK
Lead	ND	mg/L		0.02	EPA 200.8	03/14/2013 1656	MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/15/2013 1043	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/14/2013 1656	MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/15/2013 1212	BK
Selenium	ND	mg/L		0.005	EPA 200.8	03/14/2013 1656	MS
Silver	ND	mg/L		0.003	EPA 200.8	03/14/2013 1656	MS
Uranium	ND	mg/L		0.0003	EPA 200.8	03/14/2013 1656	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/14/2013 1656	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/15/2013 1212	BK
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	03/15/2013 1350	MS
<b>Metals - Total</b>							
Iron	0.68	mg/L		0.05	EPA 200.7	03/18/2013 2053	DG
Manganese	0.07	mg/L		0.02	EPA 200.7	03/18/2013 2053	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303198001

**ProjectName:** ROSS  
**Lab ID:** S1303198-005  
**ClientSample ID:** CSWELL03  
**COC:** 150250

**WorkOrder:** S1303198  
**CollectionDate:** 3/13/2013 11:10:00 AM  
**DateReceived:** 3/13/2013 2:40:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/02/2013 2132	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/02/2013 2132	SH
Gross Beta	6.5	pCi/L		3	SM 7110B	04/02/2013 2132	SH
Gross Beta Precision (±)	1.2	pCi/L			SM 7110B	04/02/2013 2132	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 911	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 911	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1741	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1741	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1541	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/25/2013 1541	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/27/2013 1833	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/27/2013 1833	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/26/2013 1418	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/26/2013 1418	MB
Thorium 229 Tracer (30-120)	67.3	pCi/L			ACW10	03/26/2013 1418	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 1123	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 1123	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/27/2013 812	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/27/2013 812	MB
Thorium 229 Tracer (30-120)	73.5	pCi/L			ACW10	03/27/2013 812	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-006  
**ClientSample ID:** P72048W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/24/2013 9:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	6.97	s.u.			Field	01/24/2013 930
Conductivity	6070	µmhos/cm			Field	01/24/2013 930
Dissolved Oxygen	1.59	mg/L			Field	01/24/2013 930
Dissolved Oxygen (pct)	14.5	%			Field	01/24/2013 930
Turbidity	1.62	NTU			Field	01/24/2013 930
Temperature	10.7	°C			Field	01/24/2013 930
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	785	mg/L		5	SM 2320B	01/25/2013 1509 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	957	mg/L		5	SM 2320B	01/25/2013 1509 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	01/25/2013 1509 KV
Chloride	261	mg/L		1	EPA 300.0	02/05/2013 1244 AMB
Fluoride	0.6	mg/L		0.1	SM 4500FC	01/25/2013 1509 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/05/2013 1529 RH
Sulfate	1200	mg/L		1	EPA 300.0	02/05/2013 1244 AMB
Calcium	204	mg/L		1	EPA 200.7	01/25/2013 1403 DG
Magnesium	25	mg/L		1	EPA 200.7	01/25/2013 1403 DG
Potassium	29	mg/L		1	EPA 200.7	01/25/2013 1403 DG
Sodium	863	mg/L		1	EPA 200.7	02/05/2013 1205 DG
Nitrogen, Ammonia (As N)	2.1	mg/L		0.1	EPA 350.1	01/28/2013 1006 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	01/25/2013 1509 KV
Electrical Conductivity	4750	µmhos/cm		5	SM 2510B	01/25/2013 1509 KV
Total Dissolved Solids (180)	3160	mg/L		10	SM 2540	01/25/2013 920 JCG
<b>Data Quality</b>						
Cation Sum	50.61	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Anion Sum	48.15	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Cation-Anion Balance (± 5%)	2.48	%		0.01	SM 1030E	02/11/2013 1026 SL
Solids, Total Dissolved (Calc)	3060	mg/L		10	SM 1030E	02/11/2013 1026 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-006  
**ClientSample ID:** P72048W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/24/2013 9:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	01/25/2013 1403 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	01/25/2013 1328 MS
Barium	ND	mg/L		0.5	EPA 200.8	01/25/2013 1328 MS
Boron	2.3	mg/L		0.1	EPA 200.7	01/25/2013 1403 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	01/25/2013 1328 MS
Chromium	ND	mg/L		0.01	EPA 200.7	01/25/2013 1403 DG
Copper	ND	mg/L		0.01	EPA 200.8	01/25/2013 1328 MS
Iron	0.09	mg/L		0.05	EPA 200.7	01/25/2013 1403 DG
Lead	ND	mg/L		0.02	EPA 200.8	01/25/2013 1328 MS
Mercury	ND	mg/L		0.001	EPA 245.1	01/31/2013 1052 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	01/25/2013 1328 MS
Nickel	ND	mg/L		0.01	EPA 200.7	01/25/2013 1403 DG
Selenium	7.35	mg/L		0.005	EPA 200.8	01/25/2013 1328 MS
Silver	ND	mg/L		0.003	EPA 200.8	01/25/2013 1328 MS
Uranium	0.0007	mg/L		0.0003	EPA 200.8	01/25/2013 1328 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	01/25/2013 1328 MS
Zinc	0.03	mg/L		0.01	EPA 200.7	01/25/2013 1403 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	01/29/2013 1349 MS
<b>Metals - Total</b>						
Iron	0.49	mg/L		0.05	EPA 200.7	01/29/2013 1811 DG
Manganese	0.14	mg/L		0.02	EPA 200.7	01/29/2013 1811 DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-006  
**ClientSample ID:** P72048W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/24/2013 9:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	12.5	pCi/L		10	SM 7110B	02/11/2013 944	SH
Gross Alpha Precision (±)	6.7	pCi/L			SM 7110B	02/11/2013 944	SH
Gross Beta	ND	pCi/L		20	SM 7110B	02/11/2013 944	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	02/11/2013 944	SH
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 902	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 902	SH
Radium 226	3.6	pCi/L		0.2	SM 7500 Ra-B	02/05/2013 1558	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	02/05/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/19/2013 155	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/19/2013 155	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924	MB
Thorium 229 Tracer (30-120)	72.2	pCi/L			ACW10	02/06/2013 924	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.2	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	1.6	pCi/L		1	OTW01	02/13/2013 1044	SH
Polonium 210 Precision (±)	0.8	pCi/L			OTW01	02/13/2013 1044	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/13/2013 850	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/13/2013 850	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/07/2013 856	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/07/2013 856	MB
Thorium 229 Tracer (30-120)	69.5	pCi/L			ACW10	02/07/2013 856	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-004  
**ClientSample ID:** P17177W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 11:45:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.36	s.u.			Field	02/07/2013 1145
Conductivity	876	µmhos/cm			Field	02/07/2013 1145
Dissolved Oxygen	1.73	mg/L			Field	02/07/2013 1145
Dissolved Oxygen (pct)	15.3	%			Field	02/07/2013 1145
Turbidity	0.45	NTU			Field	02/07/2013 1145
Temperature	8.2	°C			Field	02/07/2013 1145
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	392	mg/L		5	SM 2320B	02/08/2013 2153 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	449	mg/L		5	SM 2320B	02/08/2013 2153 KV
Alkalinity, Carbonate as CO <sub>3</sub>	15	mg/L		5	SM 2320B	02/08/2013 2153 KV
Chloride	8	mg/L		1	EPA 300.0	02/12/2013 2356 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	02/08/2013 2153 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1450 RH
Sulfate	65	mg/L		1	EPA 300.0	02/12/2013 2356 AMB
Calcium	23	mg/L		1	EPA 200.7	02/11/2013 1158 DG
Magnesium	7	mg/L		1	EPA 200.7	02/11/2013 1158 DG
Potassium	5	mg/L		1	EPA 200.7	02/11/2013 1158 DG
Sodium	177	mg/L		1	EPA 200.7	02/11/2013 1158 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	02/08/2013 1150 RH
Silica as SiO <sub>2</sub>	4.9	mg/L		0.1	EPA 200.7	02/11/2013 1158 DG
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	02/08/2013 2153 KV
Electrical Conductivity	834	µmhos/cm		5	SM 2510B	02/08/2013 2153 KV
Total Dissolved Solids (180)	600	mg/L		10	SM 2540	02/08/2013 1707 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/08/2013 953 RH
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	02/13/2013 1450 RH
Sodium Adsorption Ratio	8.3			0.1	Calculation	02/21/2013 1237 SL

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-004  
**ClientSample ID:** P17177W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 11:45:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Data Quality</b>							
Cation Sum	9.55	meq/L		0.01	SM 1030E	02/21/2013 1237	SL
Anion Sum	9.41	meq/L		0.01	SM 1030E	02/21/2013 1237	SL
Cation-Anion Balance (± 5%)	0.72	%		0.01	SM 1030E	02/21/2013 1237	SL
Solids, Total Dissolved (Calc)	520	mg/L		10	SM 1030E	02/21/2013 1237	SL
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	02/11/2013 1158	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	02/11/2013 1612	MS
Barium	ND	mg/L		0.5	EPA 200.8	02/11/2013 1612	MS
Boron	ND	mg/L		0.1	EPA 200.7	02/11/2013 1158	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	02/11/2013 1612	MS
Chromium	ND	mg/L		0.01	EPA 200.7	02/11/2013 1158	DG
Copper	ND	mg/L		0.01	EPA 200.8	02/11/2013 1612	MS
Iron	ND	mg/L		0.05	EPA 200.7	02/11/2013 1158	DG
Lead	ND	mg/L		0.02	EPA 200.8	02/11/2013 1612	MS
Manganese	ND	mg/L		0.02	EPA 200.7	02/11/2013 1158	DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 958	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	02/11/2013 1612	MS
Nickel	ND	mg/L		0.01	EPA 200.7	02/11/2013 1158	DG
Selenium	ND	mg/L		0.005	EPA 200.8	02/11/2013 1612	MS
Silver	ND	mg/L		0.003	EPA 200.8	02/11/2013 1612	MS
Uranium	0.0119	mg/L		0.0003	EPA 200.8	02/11/2013 1612	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	02/11/2013 1612	MS
Zinc	ND	mg/L		0.01	EPA 200.7	02/11/2013 1158	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	02/11/2013 2226	MS
<b>Metals - Total</b>							
Iron	ND	mg/L		0.05	EPA 200.7	02/12/2013 1826	DG
Manganese	ND	mg/L		0.02	EPA 200.7	02/12/2013 1826	DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1143	CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-004  
**ClientSample ID:** P17177W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 11:45:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	10.7	pCi/L		2	SM 7110B	02/25/2013 1758	SH
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Beta	5.8	pCi/L		3	SM 7110B	02/25/2013 1758	SH
Gross Beta Precision (±)	1.5	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	03/22/2013 1513	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	03/22/2013 1513	SH
Lead 210	1.0	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/20/2013 202	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/20/2013 202	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/21/2013 837	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/21/2013 837	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	1.1	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	0.8	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/22/2013 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/22/2013 817	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-010  
**ClientSample ID:** SBWELL02  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 4:40:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.72	s.u.			Field	03/14/2013 1640
Conductivity	1008	µmhos/cm			Field	03/14/2013 1640
Dissolved Oxygen	1.50	mg/L			Field	03/14/2013 1640
Dissolved Oxygen (pct)	13.6	%			Field	03/14/2013 1640
Turbidity	0.31	NTU			Field	03/14/2013 1640
Temperature	9.7	°C			Field	03/14/2013 1640
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	477	mg/L		5	SM 2320B	03/15/2013 2335 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	561	mg/L		5	SM 2320B	03/15/2013 2335 KV
Alkalinity, Carbonate as CO <sub>3</sub>	10	mg/L		5	SM 2320B	03/15/2013 2335 KV
Chloride	1	mg/L		1	EPA 300.0	03/18/2013 2229 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/15/2013 2335 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/22/2013 1623 AMB
Sulfate	83	mg/L		1	EPA 300.0	03/18/2013 2229 AMB
Calcium	21	mg/L		1	EPA 200.7	03/18/2013 1634 DG
Magnesium	12	mg/L		1	EPA 200.7	03/18/2013 1634 DG
Potassium	12	mg/L		1	EPA 200.7	03/18/2013 1634 DG
Sodium	190	mg/L		1	EPA 200.7	03/18/2013 1634 DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	03/20/2013 1613 RH
<b>General Parameters</b>						
pH	8.4	s.u.		0.1	SM 4500 H B	03/15/2013 2335 KV
Electrical Conductivity	982	µmhos/cm		5	SM 2510B	03/15/2013 2335 KV
Total Dissolved Solids (180)	620	mg/L		10	SM 2540	03/16/2013 1505 JCG
<b>Data Quality</b>						
Cation Sum	10.59	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	11.31	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	3.28	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	610	mg/L		10	SM 1030E	04/01/2013 1123 SL

These results apply only to the samples tested.

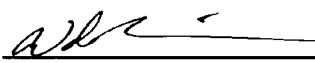
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-010  
**ClientSample ID:** SBWELL02  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 4:40:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1634 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1504 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1504 MS
Boron	0.1	mg/L		0.1	EPA 200.7	03/18/2013 1634 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1504 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1634 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1504 MS
Iron	0.19	mg/L		0.05	EPA 200.7	03/18/2013 1634 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1504 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1202 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1504 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1634 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1504 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1504 MS
Uranium	0.0006	mg/L		0.0003	EPA 200.8	03/15/2013 1504 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1504 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/18/2013 1634 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1625 MS
<b>Metals - Total</b>						
Iron	0.26	mg/L		0.05	EPA 200.7	03/19/2013 1444 DG
Manganese	0.05	mg/L		0.02	EPA 200.7	03/19/2013 1444 DG

These results apply only to the samples tested.

**RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-010  
**ClientSample ID:** SBWELL02  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 4:40:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.0	pCi/L		2	SM 7110B	04/04/2013 2013	SH
Gross Alpha Precision (±)	1.2	pCi/L			SM 7110B	04/04/2013 2013	SH
Gross Beta	8.0	pCi/L		3	SM 7110B	04/04/2013 2013	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	04/04/2013 2013	SH
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1716	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1716	SH
Polonium 210	ND	pCi/L		1	OTW01	04/03/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1745	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/25/2013 1745	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/30/2013 2154	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/30/2013 2154	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 1336	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 1336	MB
Thorium 229 Tracer (30-120)	75.4	pCi/L			ACW10	03/28/2013 1336	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1936	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1936	SH
Polonium 210	ND	pCi/L		1	OTW01	04/03/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/29/2013 1132	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/29/2013 1132	MB
Thorium 229 Tracer (30-120)	95.5	pCi/L			ACW10	03/29/2013 1132	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-006  
**ClientSample ID:** P84665W  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 2:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.21	s.u.			Field	03/14/2013 1430
Conductivity	1113	µmhos/cm			Field	03/14/2013 1430
Dissolved Oxygen	2.95	mg/L			Field	03/14/2013 1430
Dissolved Oxygen (pct)	26.6	%			Field	03/14/2013 1430
Turbidity	0.85	NTU			Field	03/14/2013 1430
Temperature	9.1	°C			Field	03/14/2013 1430
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	517	mg/L		5	SM 2320B	03/15/2013 2255 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	631	mg/L		5	SM 2320B	03/15/2013 2255 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/15/2013 2255 KV
Chloride	18	mg/L		1	EPA 300.0	03/15/2013 2231 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/15/2013 2255 KV
Nitrogen, Nitrate+Nitrite (as N)	0.9	mg/L		0.1	EPA 353.2	03/22/2013 1614 AMB
Sulfate	96	mg/L		1	EPA 300.0	03/15/2013 2231 AMB
Calcium	93	mg/L		1	EPA 200.7	03/18/2013 1613 DG
Magnesium	43	mg/L		1	EPA 200.7	03/18/2013 1613 DG
Potassium	5	mg/L		1	EPA 200.7	03/18/2013 1613 DG
Sodium	78	mg/L		1	EPA 200.7	03/18/2013 1613 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1609 RH
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	03/15/2013 2255 KV
Electrical Conductivity	1080	µmhos/cm		5	SM 2510B	03/15/2013 2255 KV
Total Dissolved Solids (180)	640	mg/L		10	SM 2540	03/16/2013 1501 JCG
<b>Data Quality</b>						
Cation Sum	11.69	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	12.91	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	4.95	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	650	mg/L		10	SM 1030E	04/01/2013 1123 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-006  
**ClientSample ID:** P84665W  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 2:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1613 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1444 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1444 MS
Boron	ND	mg/L		0.1	EPA 200.7	03/18/2013 1613 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1444 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1613 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1444 MS
Iron	0.16	mg/L		0.05	EPA 200.7	03/18/2013 1613 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1444 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1145 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1444 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1613 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1444 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1444 MS
Uranium	0.0624	mg/L		0.0003	EPA 200.8	03/15/2013 1444 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1444 MS
Zinc	0.03	mg/L		0.01	EPA 200.7	03/18/2013 1613 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1605 MS
<b>Metals - Total</b>						
Iron	0.25	mg/L		0.05	EPA 200.7	03/19/2013 1423 DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/19/2013 1423 DG

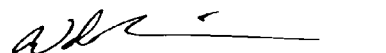
## These results apply only to the samples tested.

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-006  
**ClientSample ID:** P84665W  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 2:30:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	36.0	pCi/L		3	SM 7110B	04/03/2013 2142	SH
Gross Alpha Precision (±)	3.6	pCi/L			SM 7110B	04/03/2013 2142	SH
Gross Beta	19.1	pCi/L		4	SM 7110B	04/03/2013 2142	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	04/03/2013 2142	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1144	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1144	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1745	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1745	SH
Radium 228	1.6	pCi/L		1	Ga-Tech	04/04/2013 1739	MK
Radium 228 Precision (±)	1.1	pCi/L			Ga-Tech	04/04/2013 1739	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 845	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 845	MB
Thorium 229 Tracer (30-120)	67.4	pCi/L			ACW10	03/28/2013 845	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215	SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000	SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/29/2013 1132	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/29/2013 1132	MB
Thorium 229 Tracer (30-120)	64.3	pCi/L			ACW10	03/29/2013 1132	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-003  
**ClientSample ID:** P50113W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 11:15:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.46	s.u.			Field	02/07/2013 1115
Conductivity	1558	µmhos/cm			Field	02/07/2013 1115
Dissolved Oxygen	2.08	mg/L			Field	02/07/2013 1115
Dissolved Oxygen (pct)	18.5	%			Field	02/07/2013 1115
Turbidity	0.91	NTU			Field	02/07/2013 1115
Temperature	8.7	°C			Field	02/07/2013 1115
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	553	mg/L		5	SM 2320B	02/08/2013 2129 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	667	mg/L		5	SM 2320B	02/08/2013 2129 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	02/08/2013 2129 KV
Chloride	33	mg/L		1	EPA 300.0	02/12/2013 2344 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	02/08/2013 2129 KV
Nitrogen, Nitrate+Nitrite (as N)	12.5	mg/L		0.1	EPA 353.2	02/13/2013 1449 RH
Sulfate	214	mg/L		1	EPA 300.0	02/12/2013 2344 AMB
Calcium	94	mg/L		1	EPA 200.7	02/11/2013 1155 DG
Magnesium	53	mg/L		1	EPA 200.7	02/11/2013 1155 DG
Potassium	6	mg/L		1	EPA 200.7	02/11/2013 1155 DG
Sodium	183	mg/L		1	EPA 200.7	02/11/2013 1155 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	02/08/2013 1149 RH
Silica as SiO <sub>2</sub>	10.7	mg/L		0.1	EPA 200.7	02/11/2013 1155 DG
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	02/08/2013 2129 KV
Electrical Conductivity	1390	µmhos/cm		5	SM 2510B	02/08/2013 2129 KV
Total Dissolved Solids (180)	1020	mg/L		10	SM 2540	02/08/2013 1706 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/08/2013 952 RH
Nitrogen, Nitrate (as N)	12.5	mg/L		0.1	EPA 353.2	02/13/2013 1449 RH
Sodium Adsorption Ratio	3.7			0.1	Calculation	02/21/2013 1237 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
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- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-003  
**ClientSample ID:** P50113W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 11:15:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	17.17	meq/L		0.01	SM 1030E	02/21/2013 1237 SL
Anion Sum	17.33	meq/L		0.01	SM 1030E	02/21/2013 1237 SL
Cation-Anion Balance (± 5%)	0.46	%		0.01	SM 1030E	02/21/2013 1237 SL
Solids, Total Dissolved (Calc)	980	mg/L		10	SM 1030E	02/21/2013 1237 SL
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	02/11/2013 1155 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	02/11/2013 1607 MS
Barium	ND	mg/L		0.5	EPA 200.8	02/11/2013 1607 MS
Boron	ND	mg/L		0.1	EPA 200.7	02/11/2013 1155 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	02/11/2013 1607 MS
Chromium	ND	mg/L		0.01	EPA 200.7	02/11/2013 1155 DG
Copper	ND	mg/L		0.01	EPA 200.8	02/11/2013 1607 MS
Iron	ND	mg/L		0.05	EPA 200.7	02/11/2013 1155 DG
Lead	ND	mg/L		0.02	EPA 200.8	02/11/2013 1607 MS
Manganese	0.36	mg/L		0.02	EPA 200.7	02/11/2013 1155 DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 957 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	02/11/2013 1607 MS
Nickel	ND	mg/L		0.01	EPA 200.7	02/11/2013 1155 DG
Selenium	0.015	mg/L		0.005	EPA 200.8	02/11/2013 1607 MS
Silver	ND	mg/L		0.003	EPA 200.8	02/11/2013 1607 MS
Uranium	0.183	mg/L		0.0003	EPA 200.8	02/11/2013 1607 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	02/11/2013 1607 MS
Zinc	0.01	mg/L		0.01	EPA 200.7	02/11/2013 1155 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	02/11/2013 2211 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	02/12/2013 1823 DG
Manganese	0.36	mg/L		0.02	EPA 200.7	02/12/2013 1823 DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1142 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported:** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-003  
**ClientSample ID:** P50113W  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/7/2013 11:15:00 AM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	77.2	pCi/L		2	SM 7110B	02/25/2013 1758	SH
Gross Alpha Precision (±)	5.2	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Beta	31.0	pCi/L		3	SM 7110B	02/25/2013 1758	SH
Gross Beta Precision (±)	2.7	pCi/L			SM 7110B	02/25/2013 1758	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	03/22/2013 859	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	03/22/2013 859	SH
Lead 210	2.5	pCi/L		1	OTW01	02/26/2013 1236	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/26/2013 1236	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 952	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 952	SH
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/19/2013 2301	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/19/2013 2301	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/21/2013 837	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/21/2013 837	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/22/2013 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/22/2013 817	MB

**These results apply only to the samples tested.**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

**RL - Reporting Limit**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: 

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-007  
**ClientSample ID:** SBWELL01  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 3:10:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.78	s.u.			Field	03/14/2013 1510
Conductivity	1188	µmhos/cm			Field	03/14/2013 1510
Dissolved Oxygen	2.27	mg/L			Field	03/14/2013 1510
Dissolved Oxygen (pct)	21.6	%			Field	03/14/2013 1510
Turbidity	0.25	NTU			Field	03/14/2013 1510
Temperature	10.0	°C			Field	03/14/2013 1510
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	541	mg/L		5	SM 2320B	03/15/2013 2306 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	590	mg/L		5	SM 2320B	03/15/2013 2306 KV
Alkalinity, Carbonate as CO <sub>3</sub>	34	mg/L		5	SM 2320B	03/15/2013 2306 KV
Chloride	2	mg/L		1	EPA 300.0	03/15/2013 2242 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/15/2013 2306 KV
Nitrogen, Nitrate+Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	03/22/2013 1615 AMB
Sulfate	106	mg/L		1	EPA 300.0	03/15/2013 2242 AMB
Calcium	2	mg/L		1	EPA 200.7	03/18/2013 1627 DG
Magnesium	ND	mg/L		1	EPA 200.7	03/18/2013 1627 DG
Potassium	3	mg/L		1	EPA 200.7	03/18/2013 1627 DG
Sodium	302	mg/L		1	EPA 200.7	03/18/2013 1627 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1610 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	03/15/2013 2306 KV
Electrical Conductivity	1160	µmhos/cm		5	SM 2510B	03/15/2013 2306 KV
Total Dissolved Solids (180)	760	mg/L		10	SM 2540	03/16/2013 1502 JCG
<b>Data Quality</b>						
Cation Sum	13.29	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	13.07	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	0.80	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	740	mg/L		10	SM 1030E	04/01/2013 1123 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-007  
**ClientSample ID:** SBWELL01  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 3:10:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1627 DG
Arsenic	0.007	mg/L		0.005	EPA 200.8	03/15/2013 1449 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1449 MS
Boron	0.1	mg/L		0.1	EPA 200.7	03/18/2013 1627 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1449 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1627 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1449 MS
Iron	ND	mg/L		0.05	EPA 200.7	03/18/2013 1627 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1449 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1147 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1449 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1627 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1449 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1449 MS
Uranium	0.0006	mg/L		0.0003	EPA 200.8	03/15/2013 1449 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1449 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/18/2013 1627 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1610 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2013 1430 DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/19/2013 1430 DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-007  
**ClientSample ID:** SBWELL01  
**COC:** 148999

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 3:10:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Radionuclides - Dissolved

Gross Alpha	2.3	pCi/L		2	SM 7110B	04/04/2013 2013 SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	04/04/2013 2013 SH
Gross Beta	4.3	pCi/L		3	SM 7110B	04/04/2013 2013 SH
Gross Beta Precision (±)	2.0	pCi/L			SM 7110B	04/04/2013 2013 SH
Lead 210	2.7	pCi/L		1	OTW01	04/02/2013 1144 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/02/2013 1144 SH
Polonium 210	1.5	pCi/L		1	OTW01	04/01/2013 1850 SH
Polonium 210 Precision (±)	0.8	pCi/L			OTW01	04/01/2013 1850 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1745 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/25/2013 1745 SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/29/2013 1823 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/29/2013 1823 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 1336 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 1336 MB
Thorium 229 Tracer (30-120)	68.9	pCi/L			ACW10	03/28/2013 1336 MB

## Radionuclides - Suspended

Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1215 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1215 SH
Polonium 210	ND	pCi/L		1	OTW01	04/02/2013 1806 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1806 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000 SH
Thorium 230	ND	pCi/L		0.2	ACW10	03/29/2013 1132 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/29/2013 1132 MB
Thorium 229 Tracer (30-120)	82.6	pCi/L			ACW10	03/29/2013 1132 MB

## These results apply only to the samples tested.

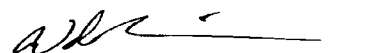
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-008  
**ClientSample ID:** FD-SBWELL01  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 3:20:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.77	s.u.			Field	03/14/2013 1520
Conductivity	1184	µmhos/cm			Field	03/14/2013 1520
Dissolved Oxygen	2.48	mg/L			Field	03/14/2013 1520
Dissolved Oxygen (pct)	22.6	%			Field	03/14/2013 1520
Turbidity	0.16	NTU			Field	03/14/2013 1520
Temperature	10.6	°C			Field	03/14/2013 1520
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	543	mg/L		5	SM 2320B	03/15/2013 2315 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	598	mg/L		5	SM 2320B	03/15/2013 2315 KV
Alkalinity, Carbonate as CO <sub>3</sub>	32	mg/L		5	SM 2320B	03/15/2013 2315 KV
Chloride	2	mg/L		1	EPA 300.0	03/15/2013 2254 AMB
Fluoride	ND	mg/L		0.1	SM 4500FC	03/15/2013 2315 KV
Nitrogen, Nitrate+Nitrite (as N)	0.1	mg/L		0.1	EPA 353.2	03/22/2013 1616 AMB
Sulfate	110	mg/L		1	EPA 300.0	03/15/2013 2254 AMB
Calcium	2	mg/L		1	EPA 200.7	03/18/2013 1630 DG
Magnesium	ND	mg/L		1	EPA 200.7	03/18/2013 1630 DG
Potassium	3	mg/L		1	EPA 200.7	03/18/2013 1630 DG
Sodium	302	mg/L		1	EPA 200.7	03/18/2013 1630 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1611 RH
<b>General Parameters</b>						
pH	8.8	s.u.		0.1	SM 4500 H B	03/15/2013 2315 KV
Electrical Conductivity	1190	µmhos/cm		5	SM 2510B	03/15/2013 2315 KV
Total Dissolved Solids (180)	760	mg/L		10	SM 2540	03/16/2013 1503 JCG
<b>Data Quality</b>						
Cation Sum	13.32	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	13.20	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	0.42	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	750	mg/L		10	SM 1030E	04/01/2013 1123 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-008  
**ClientSample ID:** FD-SBWELL01  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 3:20:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1630 DG
Arsenic	0.006	mg/L		0.005	EPA 200.8	03/15/2013 1454 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1454 MS
Boron	ND	mg/L		0.1	EPA 200.7	03/18/2013 1630 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1454 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1630 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1454 MS
Iron	ND	mg/L		0.05	EPA 200.7	03/18/2013 1630 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1454 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1149 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1454 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1630 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1454 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1454 MS
Uranium	0.0007	mg/L		0.0003	EPA 200.8	03/15/2013 1454 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1454 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/18/2013 1630 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1615 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	03/19/2013 1439 DG
Manganese	ND	mg/L		0.02	EPA 200.7	03/19/2013 1439 DG

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-008  
**ClientSample ID:** FD-SBWELL01  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 3:20:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		2	SM 7110B	04/04/2013 2013	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	04/04/2013 2013	SH
Gross Beta	ND	pCi/L		4	SM 7110B	04/04/2013 2013	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	04/04/2013 2013	SH
Lead 210	ND	pCi/L		1	OTW01	04/02/2013 1144	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/02/2013 1144	SH
Polonium 210	ND	pCi/L		1	OTW01	04/01/2013 1850	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/01/2013 1850	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1745	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/25/2013 1745	SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/29/2013 2124	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/29/2013 2124	MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 1336	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 1336	MB
Thorium 229 Tracer (30-120)	81.1	pCi/L			ACW10	03/28/2013 1336	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1936	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1936	SH
Polonium 210	ND	pCi/L		1	OTW01	04/03/2013 000	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 000	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000	SH
Thorium 230	0.3	pCi/L		0.2	ACW10	03/29/2013 1132	MB
Thorium 230 Precision (±)	0.1	pCi/L			ACW10	03/29/2013 1132	MB
Thorium 229 Tracer (30-120)	78.2	pCi/L			ACW10	03/29/2013 1132	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-009  
**ClientSample ID:** P71108W (RAW)  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 4:00:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.34	s.u.			Field	03/14/2013 1600
Conductivity	1557	µmhos/cm			Field	03/14/2013 1600
Dissolved Oxygen	1.68	mg/L			Field	03/14/2013 1600
Dissolved Oxygen (pct)	15.0	%			Field	03/14/2013 1600
Turbidity	0.15	NTU			Field	03/14/2013 1600
Temperature	9.3	°C			Field	03/14/2013 1600
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	553	mg/L		5	SM 2320B	03/15/2013 2325 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	675	mg/L		5	SM 2320B	03/15/2013 2325 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	03/15/2013 2325 KV
Chloride	6	mg/L		1	EPA 300.0	03/15/2013 2306 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/15/2013 2325 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/22/2013 1617 AMB
Sulfate	318	mg/L		1	EPA 300.0	03/15/2013 2306 AMB
Calcium	55	mg/L		1	EPA 200.7	03/18/2013 1632 DG
Magnesium	53	mg/L		1	EPA 200.7	03/18/2013 1632 DG
Potassium	8	mg/L		1	EPA 200.7	03/18/2013 1632 DG
Sodium	245	mg/L		1	EPA 200.7	03/18/2013 1632 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/20/2013 1612 RH
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	03/15/2013 2325 KV
Electrical Conductivity	1520	µmhos/cm		5	SM 2510B	03/15/2013 2325 KV
Total Dissolved Solids (180)	1020	mg/L		10	SM 2540	03/16/2013 1504 JCG
<b>Data Quality</b>						
Cation Sum	17.95	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Anion Sum	17.87	meq/L		0.01	SM 1030E	04/01/2013 1123 SL
Cation-Anion Balance (± 5%)	0.21	%		0.01	SM 1030E	04/01/2013 1123 SL
Solids, Total Dissolved (Calc)	1020	mg/L		10	SM 1030E	04/01/2013 1123 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-009  
**ClientSample ID:** P71108W (RAW)  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 4:00:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	03/18/2013 1632 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	03/15/2013 1459 MS
Barium	ND	mg/L		0.5	EPA 200.8	03/15/2013 1459 MS
Boron	ND	mg/L		0.1	EPA 200.7	03/18/2013 1632 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	03/15/2013 1459 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/18/2013 1632 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/15/2013 1459 MS
Iron	ND	mg/L		0.05	EPA 200.7	03/18/2013 1632 DG
Lead	ND	mg/L		0.02	EPA 200.8	03/15/2013 1459 MS
Mercury	ND	mg/L		0.001	EPA 245.1	03/19/2013 1155 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	03/15/2013 1459 MS
Nickel	ND	mg/L		0.01	EPA 200.7	03/18/2013 1632 DG
Selenium	ND	mg/L		0.005	EPA 200.8	03/15/2013 1459 MS
Silver	ND	mg/L		0.003	EPA 200.8	03/15/2013 1459 MS
Uranium	0.0648	mg/L		0.0003	EPA 200.8	03/15/2013 1459 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	03/15/2013 1459 MS
Zinc	0.03	mg/L		0.01	EPA 200.7	03/18/2013 1632 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	03/18/2013 1620 MS
<b>Metals - Total</b>						
Iron	0.07	mg/L		0.05	EPA 200.7	03/19/2013 1441 DG
Manganese	0.27	mg/L		0.02	EPA 200.7	03/19/2013 1441 DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 4/10/2013  
**Report ID:** S1303222001

**ProjectName:** ROSS  
**Lab ID:** S1303222-009  
**ClientSample ID:** P71108W (RAW)  
**COC:** 143949

**WorkOrder:** S1303222  
**CollectionDate:** 3/14/2013 4:00:00 PM  
**DateReceived:** 3/15/2013 7:50:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Radionuclides - Dissolved

Gross Alpha	42.6	pCi/L		3	SM 7110B	04/04/2013 2013 SH
Gross Alpha Precision (±)	4.0	pCi/L			SM 7110B	04/04/2013 2013 SH
Gross Beta	22.8	pCi/L		4	SM 7110B	04/04/2013 2013 SH
Gross Beta Precision (±)	3.0	pCi/L			SM 7110B	04/04/2013 2013 SH
Lead 210	1.3	pCi/L		1	OTW01	04/03/2013 1716 SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	04/03/2013 1716 SH
Polonium 210	ND	pCi/L		1	OTW01	04/03/2013 000 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 000 SH
Radium 226	0.3	pCi/L		0.2	SM 7500 Ra-B	03/25/2013 1745 SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	03/25/2013 1745 SH
Radium 228	ND	pCi/L		1	Ga-Tech	03/30/2013 1853 MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/30/2013 1853 MK
Thorium 230	ND	pCi/L		0.2	ACW10	03/28/2013 1336 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	03/28/2013 1336 MB
Thorium 229 Tracer (30-120)	87.7	pCi/L			ACW10	03/28/2013 1336 MB

## Radionuclides - Suspended

Lead 210	ND	pCi/L		1	OTW01	04/03/2013 1936 SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 1936 SH
Polonium 210	ND	pCi/L		1	OTW01	04/03/2013 000 SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	04/03/2013 000 SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	03/26/2013 000 SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	03/26/2013 000 SH
Thorium 230	1.0	pCi/L		0.2	ACW10	03/29/2013 1132 MB
Thorium 230 Precision (±)	0.2	pCi/L			ACW10	03/29/2013 1132 MB
Thorium 229 Tracer (30-120)	94.2	pCi/L			ACW10	03/29/2013 1132 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-003  
**ClientSample ID:** ABWELL01  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 1:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.88	s.u.			Field	01/23/2013 1300
Conductivity	1586	µmhos/cm			Field	01/23/2013 1300
Dissolved Oxygen	1.43	mg/L			Field	01/23/2013 1300
Dissolved Oxygen (pct)	12.5	%			Field	01/23/2013 1300
Turbidity	2.02	NTU			Field	01/23/2013 1300
Temperature	7.6	°C			Field	01/23/2013 1300
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	637	mg/L		5	SM 2320B	01/25/2013 1415 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	719	mg/L		5	SM 2320B	01/25/2013 1415 KV
Alkalinity, Carbonate as CO <sub>3</sub>	29	mg/L		5	SM 2320B	01/25/2013 1415 KV
Chloride	3	mg/L		1	EPA 300.0	02/05/2013 1231 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	01/25/2013 1415 KV
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	01/25/2013 1534 RH
Sulfate	211	mg/L		1	EPA 300.0	01/28/2013 1423 KB
Calcium	4	mg/L		1	EPA 200.7	02/05/2013 1203 DG
Magnesium	2	mg/L		1	EPA 200.7	02/05/2013 1203 DG
Potassium	4	mg/L		1	EPA 200.7	02/05/2013 1203 DG
Sodium	423	mg/L		1	EPA 200.7	02/05/2013 1203 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	01/28/2013 1004 RH
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	01/25/2013 1415 KV
Electrical Conductivity	1620	µmhos/cm		5	SM 2510B	01/25/2013 1415 KV
Total Dissolved Solids (180)	1090	mg/L		10	SM 2540	01/25/2013 917 JCG
<b>Data Quality</b>						
Cation Sum	18.86	meq/L		0.01	SM 1030E	02/26/2013 1600 SL
Anion Sum	17.22	meq/L		0.01	SM 1030E	02/26/2013 1600 SL
Cation-Anion Balance (± 5%)	4.54	%		0.01	SM 1030E	02/26/2013 1600 SL
Solids, Total Dissolved (Calc)	1030	mg/L		10	SM 1030E	02/26/2013 1600 SL

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

*[Signature]*  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-003  
**ClientSample ID:** ABWELL01  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 1:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	01/25/2013 1342 DG
Arsenic	0.031	mg/L		0.005	EPA 200.8	01/25/2013 1313 MS
Barium	ND	mg/L		0.5	EPA 200.8	01/25/2013 1313 MS
Boron	0.4	mg/L		0.1	EPA 200.7	01/25/2013 1342 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	01/25/2013 1313 MS
Chromium	ND	mg/L		0.01	EPA 200.7	01/25/2013 1342 DG
Copper	ND	mg/L		0.01	EPA 200.8	01/25/2013 1313 MS
Iron	0.06	mg/L		0.05	EPA 200.7	01/25/2013 1342 DG
Lead	ND	mg/L		0.02	EPA 200.8	01/25/2013 1313 MS
Mercury	ND	mg/L		0.001	EPA 245.1	01/31/2013 1037 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	01/25/2013 1313 MS
Nickel	ND	mg/L		0.01	EPA 200.7	01/25/2013 1342 DG
Selenium	ND	mg/L		0.005	EPA 200.8	01/25/2013 1313 MS
Silver	ND	mg/L		0.003	EPA 200.8	01/25/2013 1313 MS
Uranium	0.0008	mg/L		0.0003	EPA 200.8	01/25/2013 1313 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	01/25/2013 1313 MS
Zinc	0.01	mg/L		0.01	EPA 200.7	01/25/2013 1342 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	01/29/2013 1334 MS
<b>Metals - Total</b>						
Iron	0.23	mg/L		0.05	EPA 200.7	01/29/2013 1757 DG
Manganese	ND	mg/L		0.02	EPA 200.7	01/29/2013 1757 DG

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by a contract laboratory  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL  
O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-003  
**ClientSample ID:** ABWELL01  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 1:00:00 PM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.3	pCi/L		2	SM 7110B	02/11/2013 944	SH
Gross Alpha Precision (±)	1.6	pCi/L			SM 7110B	02/11/2013 944	SH
Gross Beta	ND	pCi/L		5	SM 7110B	02/11/2013 944	SH
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	02/11/2013 944	SH
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 902	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 902	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/05/2013 1558	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/05/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/18/2013 1652	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/18/2013 1652	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/04/2013 1457	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/04/2013 1457	MB
Thorium 229 Tracer (30-120)	67.6	pCi/L			ACW10	02/04/2013 1457	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 1044	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 1044	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/13/2013 850	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/13/2013 850	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924	MB
Thorium 229 Tracer (30-120)	72.5	pCi/L			ACW10	02/06/2013 924	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-001  
**ClientSample ID:** P61006W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 11:00:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.10	s.u.			Field	01/23/2013 1100
Conductivity	1049	µmhos/cm			Field	01/23/2013 1100
Dissolved Oxygen	2.69	mg/L			Field	01/23/2013 1100
Dissolved Oxygen (pct)	21.3	%			Field	01/23/2013 1100
Turbidity	31.4	NTU			Field	01/23/2013 1100
Temperature	4.7	°C			Field	01/23/2013 1100
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	496	mg/L		5	SM 2320B	01/25/2013 1337 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	598	mg/L		5	SM 2320B	01/25/2013 1337 KV
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	01/25/2013 1337 KV
Chloride	1	mg/L		1	EPA 300.0	01/28/2013 1401 KB
Fluoride	0.1	mg/L		0.1	SM 4500FC	01/25/2013 1337 KV
Nitrogen, Nitrate+Nitrite (as N)	0.2	mg/L		0.1	EPA 353.2	01/25/2013 1532 RH
Sulfate	79	mg/L		1	EPA 300.0	01/28/2013 1401 KB
Calcium	20	mg/L		1	EPA 200.7	01/25/2013 1338 DG
Magnesium	10	mg/L		1	EPA 200.7	01/25/2013 1338 DG
Potassium	10	mg/L		1	EPA 200.7	01/25/2013 1338 DG
Sodium	237	mg/L		1	EPA 200.7	01/25/2013 1338 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	01/28/2013 1002 RH
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	01/25/2013 1337 KV
Electrical Conductivity	1020	µmhos/cm		5	SM 2510B	01/25/2013 1337 KV
Total Dissolved Solids (180)	680	mg/L		10	SM 2540	01/25/2013 915 JCG
<b>Data Quality</b>						
Cation Sum	12.45	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Anion Sum	11.62	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Cation-Anion Balance (± 5%)	3.41	%		0.01	SM 1030E	02/11/2013 1026 SL
Solids, Total Dissolved (Calc)	660	mg/L		10	SM 1030E	02/11/2013 1026 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-001  
**ClientSample ID:** P61006W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 11:00:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	01/25/2013 1338	DG
Arsenic	ND	mg/L		0.005	EPA 200.8	01/25/2013 1253	MS
Barium	ND	mg/L		0.5	EPA 200.8	01/25/2013 1253	MS
Boron	0.2	mg/L		0.1	EPA 200.7	01/25/2013 1338	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	01/25/2013 1253	MS
Chromium	ND	mg/L		0.01	EPA 200.7	01/25/2013 1338	DG
Copper	ND	mg/L		0.01	EPA 200.8	01/25/2013 1253	MS
Iron	ND	mg/L		0.05	EPA 200.7	01/25/2013 1338	DG
Lead	ND	mg/L		0.02	EPA 200.8	01/25/2013 1253	MS
Mercury	ND	mg/L		0.001	EPA 245.1	01/31/2013 1028	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	01/25/2013 1253	MS
Nickel	ND	mg/L		0.01	EPA 200.7	01/25/2013 1338	DG
Selenium	ND	mg/L		0.005	EPA 200.8	01/25/2013 1253	MS
Silver	ND	mg/L		0.003	EPA 200.8	01/25/2013 1253	MS
Uranium	0.0018	mg/L		0.0003	EPA 200.8	01/25/2013 1253	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	01/25/2013 1253	MS
Zinc	ND	mg/L		0.01	EPA 200.7	01/25/2013 1338	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	01/29/2013 1300	MS
<b>Metals - Total</b>							
Iron	1.36	mg/L		0.05	EPA 200.7	01/29/2013 1746	DG
Manganese	ND	mg/L		0.02	EPA 200.7	01/29/2013 1746	DG

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-001  
**ClientSample ID:** P61006W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 11:00:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	5.7	pCi/L		2	SM 7110B	02/10/2013 1805	SH
Gross Alpha Precision (±)	1.7	pCi/L			SM 7110B	02/10/2013 1805	SH
Gross Beta	5.2	pCi/L		4	SM 7110B	02/10/2013 1805	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	02/10/2013 1805	SH
Lead 210	1.1	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 902	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 902	SH
Radium 226	0.7	pCi/L		0.2	SM 7500 Ra-B	02/05/2013 1558	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/05/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/18/2013 1050	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/18/2013 1050	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/04/2013 1457	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/04/2013 1457	MB
Thorium 229 Tracer (30-120)	81.4	pCi/L			ACW10	02/04/2013 1457	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 1044	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 1044	SH
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	02/13/2013 850	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	02/13/2013 850	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924	MB
Thorium 229 Tracer (30-120)	51.3	pCi/L			ACW10	02/06/2013 924	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-002  
**ClientSample ID:** P61007W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 11:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.65	s.u.			Field	01/23/2013 1130
Conductivity	1100	µmhos/cm			Field	01/23/2013 1130
Dissolved Oxygen	3.09	mg/L			Field	01/23/2013 1130
Dissolved Oxygen (pct)	25.0	%			Field	01/23/2013 1130
Turbidity	8.06	NTU			Field	01/23/2013 1130
Temperature	4.1	°C			Field	01/23/2013 1130
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	505	mg/L		5	SM 2320B	01/25/2013 1403 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	581	mg/L		5	SM 2320B	01/25/2013 1403 KV
Alkalinity, Carbonate as CO <sub>3</sub>	18	mg/L		5	SM 2320B	01/25/2013 1403 KV
Chloride	ND	mg/L		1	EPA 300.0	01/28/2013 1412 KB
Fluoride	0.2	mg/L		0.1	SM 4500FC	01/25/2013 1403 KV
Nitrogen, Nitrate+Nitrite (as N)	0.6	mg/L		0.1	EPA 353.2	01/25/2013 1533 RH
Sulfate	77	mg/L		1	EPA 300.0	01/28/2013 1412 KB
Calcium	13	mg/L		1	EPA 200.7	01/25/2013 1340 DG
Magnesium	7	mg/L		1	EPA 200.7	01/25/2013 1340 DG
Potassium	6	mg/L		1	EPA 200.7	01/25/2013 1340 DG
Sodium	267	mg/L		1	EPA 200.7	01/25/2013 1340 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	01/28/2013 1003 RH
<b>General Parameters</b>						
pH	8.6	s.u.		0.1	SM 4500 H B	01/25/2013 1403 KV
Electrical Conductivity	1090	µmhos/cm		5	SM 2510B	01/25/2013 1403 KV
Total Dissolved Solids (180)	730	mg/L		10	SM 2540	01/25/2013 916 JCG
<b>Data Quality</b>						
Cation Sum	12.96	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Anion Sum	11.76	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Cation-Anion Balance (± 5%)	4.85	%		0.01	SM 1030E	02/11/2013 1026 SL
Solids, Total Dissolved (Calc)	680	mg/L		10	SM 1030E	02/11/2013 1026 SL

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: 

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-002  
**ClientSample ID:** P61007W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 11:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	01/25/2013 1340 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	01/25/2013 1258 MS
Barium	ND	mg/L		0.5	EPA 200.8	01/25/2013 1258 MS
Boron	0.2	mg/L		0.1	EPA 200.7	01/25/2013 1340 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	01/25/2013 1258 MS
Chromium	ND	mg/L		0.01	EPA 200.7	01/25/2013 1340 DG
Copper	ND	mg/L		0.01	EPA 200.8	01/25/2013 1258 MS
Iron	0.15	mg/L		0.05	EPA 200.7	01/25/2013 1340 DG
Lead	ND	mg/L		0.02	EPA 200.8	01/25/2013 1258 MS
Mercury	ND	mg/L		0.001	EPA 245.1	01/31/2013 1035 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	01/25/2013 1258 MS
Nickel	ND	mg/L		0.01	EPA 200.7	01/25/2013 1340 DG
Selenium	0.005	mg/L		0.005	EPA 200.8	01/25/2013 1258 MS
Silver	ND	mg/L		0.003	EPA 200.8	01/25/2013 1258 MS
Uranium	0.0105	mg/L		0.0003	EPA 200.8	01/25/2013 1258 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	01/25/2013 1258 MS
Zinc	ND	mg/L		0.01	EPA 200.7	01/25/2013 1340 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	01/29/2013 1319 MS
<b>Metals - Total</b>						
Iron	0.71	mg/L		0.05	EPA 200.7	01/29/2013 1750 DG
Manganese	0.03	mg/L		0.02	EPA 200.7	01/29/2013 1750 DG

## These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

## RL - Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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**Sample Analysis Report**

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-002  
**ClientSample ID:** P61007W  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/23/2013 11:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.8	pCi/L		2	SM 7110B	02/11/2013 944	SH
Gross Alpha Precision (±)	1.9	pCi/L			SM 7110B	02/11/2013 944	SH
Gross Beta	5.9	pCi/L		4	SM 7110B	02/11/2013 944	SH
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	02/11/2013 944	SH
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 902	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 902	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/05/2013 1558	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/05/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/18/2013 1351	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/18/2013 1351	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/04/2013 1457	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/04/2013 1457	MB
Thorium 229 Tracer (30-120)	69.3	pCi/L			ACW10	02/04/2013 1457	MB
<b>Radionuclides - Suspended</b>							
Lead 210	3.9	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	4.2	pCi/L		1	OTW01	02/13/2013 1044	SH
Polonium 210 Precision (±)	1.2	pCi/L			OTW01	02/13/2013 1044	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/13/2013 850	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/13/2013 850	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924	MB
Thorium 229 Tracer (30-120)	61.9	pCi/L			ACW10	02/06/2013 924	MB

**These results apply only to the samples tested.**

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

**RL - Reporting Limit**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-007  
**ClientSample ID:** P22584P  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/24/2013 11:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.52	s.u.			Field	01/24/2013 1130
Conductivity	1131	µmhos/cm			Field	01/24/2013 1130
Dissolved Oxygen	4.50	mg/L			Field	01/24/2013 1130
Dissolved Oxygen (pct)	41.0	%			Field	01/24/2013 1130
Turbidity	3.42	NTU			Field	01/24/2013 1130
Temperature	9.6	°C			Field	01/24/2013 1130
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	480	mg/L		5	SM 2320B	01/25/2013 1521 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	497	mg/L		5	SM 2320B	01/25/2013 1521 KV
Alkalinity, Carbonate as CO <sub>3</sub>	44	mg/L		5	SM 2320B	01/25/2013 1521 KV
Chloride	8	mg/L		1	EPA 300.0	01/28/2013 1600 KB
Fluoride	0.3	mg/L		0.1	SM 4500FC	01/25/2013 1521 KV
Nitrogen, Nitrate+Nitrite (as N)	0.1	mg/L		0.1	EPA 353.2	01/25/2013 1537 RH
Sulfate	92	mg/L		1	EPA 300.0	01/28/2013 1600 KB
Calcium	3	mg/L		1	EPA 200.7	01/25/2013 1406 DG
Magnesium	1	mg/L		1	EPA 200.7	01/25/2013 1406 DG
Potassium	6	mg/L		1	EPA 200.7	01/25/2013 1406 DG
Sodium	283	mg/L		1	EPA 200.7	01/25/2013 1406 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	01/28/2013 951 RH
<b>General Parameters</b>						
pH	9.1	s.u.		0.1	SM 4500 H B	01/25/2013 1521 KV
Electrical Conductivity	1180	µmhos/cm		5	SM 2510B	01/25/2013 1521 KV
Total Dissolved Solids (180)	680	mg/L		10	SM 2540	01/25/2013 921 JCG
<b>Data Quality</b>						
Cation Sum	12.75	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Anion Sum	11.74	meq/L		0.01	SM 1030E	02/11/2013 1026 SL
Cation-Anion Balance (± 5%)	4.12	%		0.01	SM 1030E	02/11/2013 1026 SL
Solids, Total Dissolved (Calc)	680	mg/L		10	SM 1030E	02/11/2013 1026 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-007  
**ClientSample ID:** P22584P  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/24/2013 11:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	01/25/2013 1406	DG
Arsenic	0.010	mg/L		0.005	EPA 200.8	01/25/2013 1333	MS
Barium	ND	mg/L		0.5	EPA 200.8	01/25/2013 1333	MS
Boron	0.1	mg/L		0.1	EPA 200.7	01/25/2013 1406	DG
Cadmium	ND	mg/L		0.002	EPA 200.8	01/25/2013 1333	MS
Chromium	ND	mg/L		0.01	EPA 200.7	01/25/2013 1406	DG
Copper	ND	mg/L		0.01	EPA 200.8	01/25/2013 1333	MS
Iron	ND	mg/L		0.05	EPA 200.7	01/25/2013 1406	DG
Lead	ND	mg/L		0.02	EPA 200.8	01/25/2013 1333	MS
Mercury	ND	mg/L		0.001	EPA 245.1	01/31/2013 1054	CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	01/25/2013 1333	MS
Nickel	ND	mg/L		0.01	EPA 200.7	01/25/2013 1406	DG
Selenium	0.030	mg/L		0.005	EPA 200.8	01/25/2013 1333	MS
Silver	ND	mg/L		0.003	EPA 200.8	01/25/2013 1333	MS
Uranium	0.0183	mg/L		0.0003	EPA 200.8	01/25/2013 1333	MS
Vanadium	ND	mg/L		0.02	EPA 200.8	01/25/2013 1333	MS
Zinc	ND	mg/L		0.01	EPA 200.7	01/25/2013 1406	DG
<b>Metals - Suspended</b>							
Uranium	ND	mg/L		0.0003	EPA 200.8	01/29/2013 1354	MS
<b>Metals - Total</b>							
Iron	0.31	mg/L		0.05	EPA 200.7	01/29/2013 1814	DG
Manganese	ND	mg/L		0.02	EPA 200.7	01/29/2013 1814	DG

## These results apply only to the samples tested.

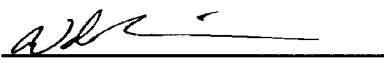
## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra Avenue  
Sheridan, WY 82801

**Date Reported:** 2/26/2013  
**Report ID:** S1301303001

**ProjectName:** Kendrick  
**Lab ID:** S1301303-007  
**ClientSample ID:** P22584P  
**COC:** 131187

**WorkOrder:** S1301303  
**CollectionDate:** 1/24/2013 11:30:00 AM  
**DateReceived:** 1/24/2013 3:03:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	24.7	pCi/L		2	SM 7110B	02/11/2013 944	SH
Gross Alpha Precision (±)	2.9	pCi/L			SM 7110B	02/11/2013 944	SH
Gross Beta	9.9	pCi/L		4	SM 7110B	02/11/2013 944	SH
Gross Beta Precision (±)	1.3	pCi/L			SM 7110B	02/11/2013 944	SH
Lead 210	1.2	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	ND	pCi/L		1	OTW01	02/13/2013 1044	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/13/2013 1044	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/05/2013 1558	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/05/2013 1558	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/19/2013 456	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/19/2013 456	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/06/2013 924	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/06/2013 924	MB
Thorium 229 Tracer (30-120)	79.4	pCi/L			ACW10	02/06/2013 924	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	02/14/2013 000	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/14/2013 000	SH
Polonium 210	1.5	pCi/L		1	OTW01	02/13/2013 1044	SH
Polonium 210 Precision (±)	0.9	pCi/L			OTW01	02/13/2013 1044	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/13/2013 850	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/13/2013 850	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/07/2013 856	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/07/2013 856	MB
Thorium 229 Tracer (30-120)	61.4	pCi/L			ACW10	02/07/2013 856	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-001  
**ClientSample ID:** P7328P - HBWELL01  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/6/2013 3:00:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.63	s.u.			Field	02/06/2013 1500
Conductivity	793	µmhos/cm			Field	02/06/2013 1500
Dissolved Oxygen	1.80	mg/L			Field	02/06/2013 1500
Dissolved Oxygen (pct)	16.3	%			Field	02/06/2013 1500
Turbidity	10.39	NTU			Field	02/06/2013 1500
Temperature	9.7	°C			Field	02/06/2013 1500
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	361	mg/L		5	SM 2320B	02/18/2013 1523 KV
Alkalinity, Bicarbonate as HCO <sub>3</sub>	419	mg/L		5	SM 2320B	02/18/2013 1523 KV
Alkalinity, Carbonate as CO <sub>3</sub>	11	mg/L		5	SM 2320B	02/18/2013 1523 KV
Chloride	6	mg/L		1	EPA 300.0	02/19/2013 1103 AMB
Fluoride	0.1	mg/L		0.1	SM 4500FC	02/08/2013 2105 KV
Nitrogen, Nitrate+Nitrite (as N)	0.8	mg/L		0.1	EPA 353.2	02/13/2013 1447 RH
Sulfate	66	mg/L		1	EPA 300.0	02/19/2013 1103 AMB
Calcium	63	mg/L		1	EPA 200.7	02/19/2013 1237 DG
Magnesium	48	mg/L		1	EPA 200.7	02/19/2013 1237 DG
Potassium	15	mg/L		1	EPA 200.7	02/19/2013 1237 DG
Sodium	28	mg/L		1	EPA 200.7	02/19/2013 1237 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	02/08/2013 1147 RH
Silica as SiO <sub>2</sub>	10.9	mg/L		0.1	EPA 200.7	02/11/2013 1151 DG
<b>General Parameters</b>						
pH	8.3	s.u.		0.1	SM 4500 H B	02/08/2013 2105 KV
Electrical Conductivity	725	µmhos/cm		5	SM 2510B	02/08/2013 2105 KV
Total Dissolved Solids (180)	420	mg/L		10	SM 2540	02/08/2013 1704 JCG
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	02/08/2013 950 RH
Nitrogen, Nitrate (as N)	0.8	mg/L		0.1	EPA 353.2	02/13/2013 1447 RH
Sodium Adsorption Ratio	0.6			0.1	Calculation	02/21/2013 1237 SL

These results apply only to the samples tested.

## RL - Reporting Limit

**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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: 

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-001  
**ClientSample ID:** P7328P - HBWELL01  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/6/2013 3:00:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Data Quality						
Cation Sum	8.70	meq/L		0.01	SM 1030E	02/21/2013 1237 SL
Anion Sum	8.84	meq/L		0.01	SM 1030E	02/21/2013 1237 SL
Cation-Anion Balance (± 5%)	0.81	%		0.01	SM 1030E	02/21/2013 1237 SL
Solids, Total Dissolved (Calc)	460	mg/L		10	SM 1030E	02/21/2013 1237 SL
Metals - Dissolved						
Aluminum	ND	mg/L		0.1	EPA 200.7	02/11/2013 1151 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	02/11/2013 1543 MS
Barium	ND	mg/L		0.5	EPA 200.8	02/11/2013 1543 MS
Boron	ND	mg/L		0.1	EPA 200.7	02/11/2013 1151 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	02/11/2013 1543 MS
Chromium	ND	mg/L		0.01	EPA 200.7	02/11/2013 1151 DG
Copper	ND	mg/L		0.01	EPA 200.8	02/11/2013 1543 MS
Iron	0.50	mg/L		0.05	EPA 200.7	02/11/2013 1151 DG
Lead	ND	mg/L		0.02	EPA 200.8	02/11/2013 1543 MS
Manganese	0.07	mg/L		0.02	EPA 200.7	02/11/2013 1151 DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 947 CS
Molybdenum	ND	mg/L		0.02	EPA 200.8	02/11/2013 1543 MS
Nickel	ND	mg/L		0.01	EPA 200.7	02/11/2013 1151 DG
Selenium	ND	mg/L		0.005	EPA 200.8	02/11/2013 1543 MS
Silver	ND	mg/L		0.003	EPA 200.8	02/11/2013 1543 MS
Uranium	0.0087	mg/L		0.0003	EPA 200.8	02/11/2013 1543 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	02/11/2013 1543 MS
Zinc	0.22	mg/L		0.01	EPA 200.7	02/11/2013 1151 DG
Metals - Suspended						
Uranium	0.0006	mg/L		0.0003	EPA 200.8	02/11/2013 2147 MS
Metals - Total						
Iron	2.45	mg/L		0.05	EPA 200.7	02/12/2013 1805 DG
Manganese	0.09	mg/L		0.02	EPA 200.7	02/12/2013 1805 DG
Mercury	ND	mg/L		0.001	EPA 245.1	02/12/2013 1125 CS

These results apply only to the samples tested.

## RL - Reporting Limit

**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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 4/16/2013  
**Report ID:** S1302097001

**ProjectName:** Kendrick  
**Lab ID:** S1302097-001  
**ClientSample ID:** P7328P - HBWELL01  
**COC:** 131188

**WorkOrder:** S1302097  
**CollectionDate:** 2/6/2013 3:00:00 PM  
**DateReceived:** 2/8/2013 8:11:00 AM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	8.2	pCi/L		2	SM 7110B	02/22/2013 924	SH
Gross Alpha Precision (±)	1.9	pCi/L			SM 7110B	02/22/2013 924	SH
Gross Beta	16.5	pCi/L		3	SM 7110B	02/22/2013 924	SH
Gross Beta Precision (±)	2.2	pCi/L			SM 7110B	02/22/2013 924	SH
Gross Gamma	ND	pCi/L		50	EPA 901.1M	03/21/2013 910	SH
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	03/21/2013 910	SH
Lead 210	ND	pCi/L		1	OTW01	02/26/2013 1236	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1236	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 952	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 952	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Radium 228	ND	pCi/L		1	Ga-Tech	02/19/2013 1659	MK
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	02/19/2013 1659	MK
Thorium 230	ND	pCi/L		0.2	ACW10	02/21/2013 837	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/21/2013 837	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	02/26/2013 1458	SH
Lead 210 Precision (±)	0.4	pCi/L			OTW01	02/26/2013 1458	SH
Polonium 210	ND	pCi/L		1	OTW01	02/26/2013 1118	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	02/26/2013 1118	SH
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	02/18/2013 1233	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	02/18/2013 1233	SH
Thorium 230	ND	pCi/L		0.2	ACW10	02/22/2013 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	02/22/2013 817	MB

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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*X no sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P 22583P

Date: 6/24/14 Time: 0950

**Legal Location**

**Landowner**

Name: Swanda

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Qtr/Qtr SW SW

SEC 31

TWN 53

RNG 67

Picture #(s) \_\_\_\_\_

**Industrial** \_\_\_\_\_

**Stock** ☒

**Domestic** \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P22583P

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH \_\_\_\_\_

Cond. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

D.O. (%) \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: No sample - well shut off. -  
Swanda does not want us to turn it  
on

*\*No Sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P150688 W

Date: 6/24/14 Time: 1020

**Legal Location**

**Landowner**

Qtr/Qtr NE SW

Name: Swanda

SEC 25

Address \_\_\_\_\_

TWN 53

Phone# \_\_\_\_\_

RNG 68

**Industrial** \_\_\_\_\_

**Picture #(s)** \_\_\_\_\_

**Stock** ☒ \_\_\_\_\_

**Domestic** \_\_\_\_\_

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** \_\_\_\_\_

**Location (Decimal Degrees)**

**Water Quality**

Lat \_\_\_\_\_

pH \_\_\_\_\_

Long \_\_\_\_\_

Cond. \_\_\_\_\_

Elev. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

**Water Level (ft):** \_\_\_\_\_

D.O. (%) \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

ORP (mV) \_\_\_\_\_

**Comments:** No sample - well shut off.

Swanda does not want us to turn it

on

*X No Sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P74677W

Date: 6/24/14 Time: 1030

Legal Location

Landowner

Qtr/Qtr NWNE

Name: Martian Oil Co.

SEC 36

Address \_\_\_\_\_

TWN 53

Phone# \_\_\_\_\_

RNG 68

Industrial \_\_\_\_\_

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

Location (Decimal Degrees)

Water Quality

Lat \_\_\_\_\_

pH \_\_\_\_\_

Long \_\_\_\_\_

Cond. \_\_\_\_\_

Elev. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: No sample - no permission to  
sample - called and left message but no  
response.

*\*no sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P2113CP

Date: 6/24/14 Time: 1100

**Legal Location**

**Landowner**

Qtr/Qtr SW NE

Name: Swanda

SEC 26

Address \_\_\_\_\_

TWN 53

Phone# \_\_\_\_\_

RNG 68

**Industrial** \_\_\_\_\_

**Picture #(s)** \_\_\_\_\_

**Stock** ☒ \_\_\_\_\_

**Domestic** \_\_\_\_\_

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** \_\_\_\_\_

**Location (Decimal Degrees)**

**Water Quality**

Lat \_\_\_\_\_

pH \_\_\_\_\_

Long \_\_\_\_\_

Cond. \_\_\_\_\_

Elev. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

**Water Level (ft):** \_\_\_\_\_

D.O. (%) \_\_\_\_\_

**Casing Height (ft):** \_\_\_\_\_

ORP (mV) \_\_\_\_\_

**Comments:** no sample - Well shut off - Swanda  
does not want well turned on

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: TDWELL01

Date: 6/24/14 Time: 1215

**Legal Location**

**Landowner**

Name: Davis

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Qtr/Qtr nwnw

SEC 7

TWN 52

RNG 67

Picture #(s) \_\_\_\_\_

Industrial \_\_\_\_\_

Stock \_\_\_\_\_

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.44

Cond. 876

Temp. °C 11.5

Turbidity (ntu) 0.11

D.O. (mg/L) 2.73

D.O. (%) 26.4

ORP (mV) +56

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: water clear - no odor

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P 1440 W

Date: 6/24/14 Time: 1400

Legal Location

Landowner

Name: Argent Energy Trust

Address formerly HillCorp.

Phone# \_\_\_\_\_

Qtr/Qtr SWNW

SEC 11

TWN 52

RNG 68

Picture #(s) \_\_\_\_\_

Industrial ✓

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P 1440 W

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH 9.09

Cond. 1291

Temp. ° C 15.3

Turbidity (ntu) 0.38

D.O. (mg/L) 6.15

Water Level (ft): \_\_\_\_\_

D.O. (%) 62.4

Casing Height (ft): \_\_\_\_\_

ORP (mV) -17

Comments: Water Clear - no odor

Send results to Mark Nicholson with  
Argent @ mnicholson@argenteenergytrust.com

LCF

CO# 151530



*\* No Sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P150187W

Date: 6/24/14 Time: 1430

Legal Location

Landowner

Name: Argent Energy Trust

Address formerly Hillcorp.

Phone# \_\_\_\_\_

Qtr/Qtr NWSE

SEC 11

TWN 52

RNG 68

Picture #(s) \_\_\_\_\_

Industrial ✓

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P150187W

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH \_\_\_\_\_

Cond. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

D.O. (%) \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: No sample - Mark Nicholson told  
this well is not working due to electrical  
problem

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P72048W

Date: 6/24/14 Time: 1500

**Legal Location**

**Landowner**

Qtr/Qtr NWSE

Name: Whiting Oil and Gas

SEC 30

Address \_\_\_\_\_

TWN 53

Phone# \_\_\_\_\_

RNG 67

Industrial ☒

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

**Water Quality**

Lat \_\_\_\_\_

pH 8.69

Long \_\_\_\_\_

Cond. 1602

Elev. \_\_\_\_\_

Temp. °C 12.5

Turbidity (ntu) 0.13

D.O. (mg/L) 1.74

Water Level (ft): \_\_\_\_\_

D.O. (%) 16.9

Casing Height (ft): \_\_\_\_\_

ORP (mV) -51

Comments: Water clear - no odor - send results  
to John Webb in Cody, WY and Lyle Etbauer in  
Moorecroft

LCF

COC # 151530

*\* NO sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P58961W

Date: 6/24/14 Time: 1620

Legal Location

Landowner

Qtr/Qtr NW/NW

Name: Evans

SEC 32

Address \_\_\_\_\_

TWN 54

Phone# \_\_\_\_\_

RNG 67

Industrial \_\_\_\_\_

Picture #(s) \_\_\_\_\_

Stock ☒

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

Location (Decimal Degrees)

Water Quality

Lat \_\_\_\_\_

pH \_\_\_\_\_

Long \_\_\_\_\_

Cond. \_\_\_\_\_

Elev. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: NO sample due to pipeline ~~access~~  
Construction blocking access to well.  
Charlotte Evans didn't think I could get  
to the well, but I took my self and she  
was correct.

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P 20 521 W

Date: 6/25/14 Time: 0830

**Landowner**

Name: Hahn

Address \_\_\_\_\_

Phone# \_\_\_\_\_

**Legal Location**

Qtr/Qtr NW NW

SEC 2

TWN 52

RNG 68

Picture #(s) \_\_\_\_\_

Industrial \_\_\_\_\_

Stock ☒

Domestic ☒

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

**Location (Decimal Degrees)**

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

**Water Quality**

pH 7.76

Cond. 711

Temp. °C 10.1

Turbidity (ntu) 1.53

D.O. (mg/L) 8.60

D.O. (%) 87.78.6

ORP (mV) +68 +73

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: water clear - no odor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

LCF  
COC# 151 530

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: AB WELL 01

Date: 6/25/14 Time: 1100

**Legal Location**

**Landowner**

Qtr/Qtr SESW

Name: Austin Burch

SEC 2

Address \_\_\_\_\_

TWN 53

Phone# \_\_\_\_\_

RNG 68

**Industrial** \_\_\_\_\_

**Picture #(s)** \_\_\_\_\_

**Stock** \_\_\_\_\_

**Domestic** ☒

**SEO Permitted Facility Name:** \_\_\_\_\_

**Permit No.** \_\_\_\_\_

**Location (Decimal Degrees)**

**Water Quality**

Lat \_\_\_\_\_

pH 8.74

Long \_\_\_\_\_

Cond. 1605

Elev. \_\_\_\_\_

Temp. °C 13.0

Turbidity (ntu) 0.61

D.O. (mg/L) 2.07

**Water Level (ft):** \_\_\_\_\_

D.O. (%) 19.7

**Casing Height (ft):** \_\_\_\_\_

ORP (mV) -113

**Comments:** water clear - no odor

\_\_\_\_\_

LCF

COCH 151530

\* Field Duplicate

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: FD-ABWELL 01

Date: 6/25/14 Time: 1105

Landowner

Name: Austin Burch

Address \_\_\_\_\_

Phone# \_\_\_\_\_

Legal Location

Qtr/Qtr SESW

SEC 2

TWN 53

RNG 68

Picture #(s) \_\_\_\_\_

Industrial \_\_\_\_\_

Stock \_\_\_\_\_

Domestic ✓

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

Location (Decimal Degrees)

Lat \_\_\_\_\_

Long \_\_\_\_\_

Elev. \_\_\_\_\_

Water Quality

pH 8.74

Cond. 1605

Temp. °C 13.0

Turbidity (ntu) 0.61

D.O. (mg/L) 2.07

D.O. (%) 19.7

ORP (mV) -113

Water Level (ft): \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

Comments: Field Duplicate

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

tb

COC# 151530

*\* No Sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P55196W

Date: 6/25/14 Time: 0900

**Legal Location**

**Landowner**

Qtr/Qtr NENW

Name: Hahn

SEC 27

Address \_\_\_\_\_

TWN 53

Phone# \_\_\_\_\_

RNG 68

Industrial \_\_\_\_\_

Picture #(s) \_\_\_\_\_

Stock ✓

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. P55196W

**Location (Decimal Degrees)**

**Water Quality**

Lat \_\_\_\_\_

pH \_\_\_\_\_

Long \_\_\_\_\_

Cond. \_\_\_\_\_

Elev. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: No sample - well not working  
due to electrical problem

*X no sample*

WWC ENGINEERING  
LANDOWNER WATER SAMPLING FORM  
For Strata Energy

Name: P 72178V

Date: 6/25/14 Time: 1000

Legal Location

Landowner

Qtr/Qtr SESW

Name: Texas Trail

SEC 14

Address \_\_\_\_\_

TWN 53

Phone# \_\_\_\_\_

RNG 68

Industrial ☒

Picture #(s) \_\_\_\_\_

Stock \_\_\_\_\_

Domestic \_\_\_\_\_

SEO Permitted Facility Name: \_\_\_\_\_

Permit No. \_\_\_\_\_

Location (Decimal Degrees)

Water Quality

Lat \_\_\_\_\_

pH \_\_\_\_\_

Long \_\_\_\_\_

Cond. \_\_\_\_\_

Elev. \_\_\_\_\_

Temp. ° C \_\_\_\_\_

Turbidity (ntu) \_\_\_\_\_

D.O. (mg/L) \_\_\_\_\_

Water Level (ft): \_\_\_\_\_

D.O. (%) \_\_\_\_\_

Casing Height (ft): \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Comments: NO sample - Kelly Denise is  
the pumper for this oil field and he  
told me there was no where to collect  
a sample from this well





## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-001  
**ClientSample ID:** TDWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 12:15:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.44	s.u.			Field	06/24/2014 1215
Conductivity	876	µmhos/cm			Field	06/24/2014 1215
Dissolved Oxygen	2.73	mg/L			Field	06/24/2014 1215
Dissolved Oxygen (pct)	26.4	%			Field	06/24/2014 1215
Turbidity	0.11	NTU			Field	06/24/2014 1215
Temperature	11.5	°C			Field	06/24/2014 1215
Oxygen Reduction Potential (ORP)	+56	mV			Field	06/24/2014 1215
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	407	mg/L		5	SM 2320B	06/26/2014 1626 BT
Alkalinity, Bicarbonate as HCO <sub>3</sub>	496	mg/L		5	SM 2320B	06/26/2014 1626 BT
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	06/26/2014 1626 BT
Chloride	14	mg/L		1	EPA 300.0	06/27/2014 1442 AMB
Fluoride	0.2	mg/L		0.1	SM 4500FC	06/26/2014 1626 BT
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/27/2014 1245 CAW
Sulfate	54	mg/L		1	EPA 300.0	06/27/2014 1442 AMB
Calcium	76	mg/L		1	EPA 200.7	06/26/2014 1600 DG
Magnesium	40	mg/L		1	EPA 200.7	06/26/2014 1600 DG
Potassium	4	mg/L		1	EPA 200.7	06/26/2014 1600 DG
Sodium	51	mg/L		1	EPA 200.7	06/26/2014 1600 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	07/02/2014 1202 CAW
Silica as SiO <sub>2</sub>	11.8	mg/L		0.1	EPA 200.7	06/26/2014 1600 DG
<b>General Parameters</b>						
pH	8.1	s.u.		0.1	SM 4500 H B	06/26/2014 1626 BT
Electrical Conductivity	865	µmhos/cm		5	SM 2510B	06/26/2014 1626 BT
Total Dissolved Solids (180)	500	mg/L		10	SM 2540	06/26/2014 1450 BM
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/26/2014 1343 CAW
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	07/14/2014 000 BC
Sodium Adsorption Ratio	1.2			0.1	Calculation	07/14/2014 830 BC

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-001  
**ClientSample ID:** TDWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 12:15:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	9.40	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Anion Sum	9.66	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Cation-Anion Balance ( $\pm 5\%$ )	1.37	%		0.01	SM 1030E	07/14/2014 830 BC
Solids, Total Dissolved (Calc)	500	mg/L		10	SM 1030E	07/14/2014 830 BC
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/26/2014 1600 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/25/2014 2005 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/25/2014 2005 MS
Boron	ND	mg/L		0.1	EPA 200.7	06/26/2014 1600 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/25/2014 2005 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/26/2014 1600 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/25/2014 2005 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/26/2014 1600 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/25/2014 2005 MS
Manganese	ND	mg/L		0.02	EPA 200.7	06/26/2014 1600 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/01/2014 1410 CJB
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/25/2014 2005 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/26/2014 1600 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/25/2014 2005 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/25/2014 2005 MS
Uranium	0.0132	mg/L		0.0003	EPA 200.8	06/25/2014 2005 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/25/2014 2005 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/26/2014 1600 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/09/2014 029 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	06/30/2014 1459 DG
Manganese	ND	mg/L		0.02	EPA 200.7	06/30/2014 1459 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2014 1405 CJB

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-001  
**ClientSample ID:** TDWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 12:15:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	3.4	pCi/L		2	SM 7110B	07/14/2014 2228	MB
Gross Alpha Precision (±)	0.8	pCi/L			SM 7110B	07/14/2014 2228	MB
Gross Beta	3.5	pCi/L		3	SM 7110B	07/14/2014 2228	MB
Gross Beta Precision (±)	1.0	pCi/L			SM 7110B	07/14/2014 2228	MB
Gross Gamma	ND	pCi/L		50	EPA 901.1M	08/14/2014 1325	MB
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	08/14/2014 1325	MB
Lead 210	1.1	pCi/L		1	OTW01	07/11/2014 915	MB
Lead 210 (Dissolved) Precision (±)	0.4	pCi/L			OTW01	07/11/2014 915	MB
Polonium 210	ND	pCi/L		1	OTW01	07/11/2014 1519	MB
Polonium 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 1519	MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2014 1338	MB
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2014 1338	MB
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2014 815	MB
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2014 815	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/10/2014 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/10/2014 817	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.1	pCi/L		1	OTW01	07/21/2014 1209	MB
Lead 210 (Suspended) Precision (±)	0.4	pCi/L			OTW01	07/21/2014 1209	MB
Polonium 210	ND	pCi/L		1	OTW01	07/16/2014 000	MB
Polonium 210 (Suspended) Precision (±)	NA	pCi/L			OTW01	07/16/2014 000	MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/16/2014 1752	MB
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/16/2014 1752	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1253	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1253	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL or is less than LCL  
O Outside the Range of Dilutions  
X Matrix Effect

C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by 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

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-004  
**ClientSample ID:** P20521W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 8:30:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	7.76	s.u.			Field	06/25/2014 830
Conductivity	711	µmhos/cm			Field	06/25/2014 830
Dissolved Oxygen	8.60	mg/L			Field	06/25/2014 830
Dissolved Oxygen (pct)	78.6	%			Field	06/25/2014 830
Turbidity	1.53	NTU			Field	06/25/2014 830
Temperature	10.1	°C			Field	06/25/2014 830
Oxygen Reduction Potential (ORP)	+73	mV			Field	06/25/2014 830
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	255	mg/L		5	SM 2320B	06/26/2014 1723 BT
Alkalinity, Bicarbonate as HCO <sub>3</sub>	311	mg/L		5	SM 2320B	06/26/2014 1723 BT
Alkalinity, Carbonate as CO <sub>3</sub>	ND	mg/L		5	SM 2320B	06/26/2014 1723 BT
Chloride	29	mg/L		1	EPA 300.0	06/27/2014 1524 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	06/26/2014 1723 BT
Nitrogen, Nitrate+Nitrite (as N)	13.2	mg/L		0.1	EPA 353.2	06/27/2014 1609 CAW
Sulfate	17	mg/L		1	EPA 300.0	06/27/2014 1524 AMB
Calcium	65	mg/L		1	EPA 200.7	06/26/2014 1620 DG
Magnesium	34	mg/L		1	EPA 200.7	06/26/2014 1620 DG
Potassium	9	mg/L		1	EPA 200.7	06/26/2014 1620 DG
Sodium	18	mg/L		1	EPA 200.7	06/26/2014 1620 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	07/02/2014 1205 CAW
Silica as SiO <sub>2</sub>	10.6	mg/L		0.1	EPA 200.7	06/26/2014 1620 DG
<b>General Parameters</b>						
pH	8.2	s.u.		0.1	SM 4500 H B	06/26/2014 1723 BT
Electrical Conductivity	686	µmhos/cm		5	SM 2510B	06/26/2014 000 BT
Total Dissolved Solids (180)	380	mg/L		10	SM 2540	06/26/2014 1453 BM
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/26/2014 1346 CAW
Nitrogen, Nitrate (as N)	13.2	mg/L		0.1	EPA 353.2	07/14/2014 000 BC
Sodium Adsorption Ratio	0.4			0.1	Calculation	07/14/2014 830 BC

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-004  
**ClientSample ID:** P20521W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 8:30:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	7.04	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Anion Sum	7.21	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Cation-Anion Balance (± 5%)	1.21	%		0.01	SM 1030E	07/14/2014 830 BC
Solids, Total Dissolved (Calc)	340	mg/L		10	SM 1030E	07/14/2014 830 BC
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/26/2014 1620 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/25/2014 2037 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/25/2014 2037 MS
Boron	ND	mg/L		0.1	EPA 200.7	06/26/2014 1620 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/25/2014 2037 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/26/2014 1620 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/25/2014 2037 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/26/2014 1620 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/25/2014 2037 MS
Manganese	ND	mg/L		0.02	EPA 200.7	06/26/2014 1620 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/01/2014 1415 CJB
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/25/2014 2037 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/26/2014 1620 DG
Selenium	0.020	mg/L		0.005	EPA 200.8	06/25/2014 2037 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/25/2014 2037 MS
Uranium	0.0168	mg/L		0.0003	EPA 200.8	06/25/2014 2037 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/25/2014 2037 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/26/2014 1620 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/09/2014 054 MS
<b>Metals - Total</b>						
Iron	0.19	mg/L		0.05	EPA 200.7	06/30/2014 1512 DG
Manganese	ND	mg/L		0.02	EPA 200.7	06/30/2014 1512 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2014 1420 CJB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL or is less than LCL  
O Outside the Range of Dilutions  
X Matrix Effect

C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by 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

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-004  
**ClientSample ID:** P20521W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 8:30:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	9.3	pCi/L		2	SM 7110B	07/14/2014 2228	MB
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	07/14/2014 2228	MB
Gross Beta	7.6	pCi/L		3	SM 7110B	07/14/2014 2228	MB
Gross Beta Precision (±)	1.3	pCi/L			SM 7110B	07/14/2014 2228	MB
Gross Gamma	ND	pCi/L		50	EPA 901.1M	08/14/2014 1325	MB
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	08/14/2014 1325	MB
Lead 210	ND	pCi/L		1	OTW01	07/11/2014 915	MB
Lead 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 915	MB
Polonium 210	ND	pCi/L		1	OTW01	07/11/2014 1519	MB
Polonium 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 1519	MB
Radium 226	1.2	pCi/L		0.2	SM 7500 Ra-B	07/11/2014 1338	MB
Radium 226 Precision (±)	0.2	pCi/L			SM 7500 Ra-B	07/11/2014 1338	MB
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2014 1717	MB
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2014 1717	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/10/2014 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/10/2014 817	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.5	pCi/L		1	OTW01	07/21/2014 1209	MB
Lead 210 (Suspended) Precision (±)	0.5	pCi/L			OTW01	07/21/2014 1209	MB
Polonium 210	ND	pCi/L		1	OTW01	07/16/2014 000	MB
Polonium 210 (Suspended) Precision (±)	NA	pCi/L			OTW01	07/16/2014 000	MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/16/2014 1752	MB
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/16/2014 1752	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1656	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1656	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL or is less than LCL  
O Outside the Range of Dilutions  
X Matrix Effect

C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by 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

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-002  
**ClientSample ID:** P1440W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 2:00:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	9.09	s.u.			Field	06/24/2014 1400
Conductivity	1291	µmhos/cm			Field	06/24/2014 1400
Dissolved Oxygen	6.15	mg/L			Field	06/24/2014 1400
Dissolved Oxygen (pct)	62.4	%			Field	06/24/2014 1400
Turbidity	0.38	NTU			Field	06/24/2014 1400
Temperature	15.3	°C			Field	06/24/2014 1400
Oxygen Reduction Potential (ORP)	-17	mV			Field	06/24/2014 1400
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	390	mg/L		5	SM 2320B	06/26/2014 1637 BT
Alkalinity, Bicarbonate as HCO <sub>3</sub>	419	mg/L		5	SM 2320B	06/26/2014 1637 BT
Alkalinity, Carbonate as CO <sub>3</sub>	28	mg/L		5	SM 2320B	06/26/2014 1637 BT
Chloride	5	mg/L		1	EPA 300.0	06/27/2014 1456 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	06/26/2014 1637 BT
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/27/2014 1247 CAW
Sulfate	235	mg/L		1	EPA 300.0	06/27/2014 1456 AMB
Calcium	3	mg/L		1	EPA 200.7	06/26/2014 1605 DG
Magnesium	ND	mg/L		1	EPA 200.7	06/26/2014 1605 DG
Potassium	3	mg/L		1	EPA 200.7	06/26/2014 1605 DG
Sodium	301	mg/L		1	EPA 200.7	06/26/2014 1605 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/02/2014 1203 CAW
Silica as SiO <sub>2</sub>	8.8	mg/L		0.1	EPA 200.7	06/26/2014 1605 DG
<b>General Parameters</b>						
pH	8.9	s.u.		0.1	SM 4500 H B	06/26/2014 1637 BT
Electrical Conductivity	1310	µmhos/cm		5	SM 2510B	06/26/2014 1637 BT
Total Dissolved Solids (180)	830	mg/L		10	SM 2540	06/26/2014 1451 BM
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/26/2014 1344 CAW
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	07/14/2014 000 BC
Sodium Adsorption Ratio	51.8			0.1	Calculation	07/14/2014 830 BC

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-002  
**ClientSample ID:** P1440W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 2:00:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	13.32	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Anion Sum	12.86	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Cation-Anion Balance (± 5%)	1.74	%		0.01	SM 1030E	07/14/2014 830 BC
Solids, Total Dissolved (Calc)	790	mg/L		10	SM 1030E	07/14/2014 830 BC
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/26/2014 1605 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/25/2014 2011 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/25/2014 2011 MS
Boron	0.1	mg/L		0.1	EPA 200.7	06/26/2014 1605 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/25/2014 2011 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/26/2014 1605 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/25/2014 2011 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/26/2014 1605 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/25/2014 2011 MS
Manganese	ND	mg/L		0.02	EPA 200.7	06/26/2014 1605 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/01/2014 1412 CJB
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/25/2014 2011 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/26/2014 1605 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/25/2014 2011 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/25/2014 2011 MS
Uranium	0.0051	mg/L		0.0003	EPA 200.8	06/25/2014 2011 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/25/2014 2011 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/26/2014 1605 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/09/2014 045 MS
<b>Metals - Total</b>						
Iron	0.06	mg/L		0.05	EPA 200.7	06/30/2014 1501 DG
Manganese	ND	mg/L		0.02	EPA 200.7	06/30/2014 1501 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2014 1416 CJB

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-002  
**ClientSample ID:** P1440W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 2:00:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Radionuclides - Dissolved

Gross Alpha	10.1	pCi/L		2	SM 7110B	07/14/2014 2228 MB
Gross Alpha Precision (±)	2.7	pCi/L			SM 7110B	07/14/2014 2228 MB
Gross Beta	ND	pCi/L		3	SM 7110B	07/14/2014 2228 MB
Gross Beta Precision (±)	NA	pCi/L			SM 7110B	07/14/2014 2228 MB
Gross Gamma	ND	pCi/L		50	EPA 901.1M	08/14/2014 1325 MB
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	08/14/2014 1325 MB
Lead 210	1.1	pCi/L		1	OTW01	07/11/2014 915 MB
Lead 210 (Dissolved) Precision (±)	0.4	pCi/L			OTW01	07/11/2014 915 MB
Polonium 210	ND	pCi/L		1	OTW01	07/11/2014 1519 MB
Polonium 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 1519 MB
Radium 226	0.4	pCi/L		0.2	SM 7500 Ra-B	07/11/2014 1338 MB
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/11/2014 1338 MB
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2014 1116 MB
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2014 1116 MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/10/2014 817 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/10/2014 817 MB

## Radionuclides - Suspended

Lead 210	1.3	pCi/L		1	OTW01	07/21/2014 1209 MB
Lead 210 (Suspended) Precision (±)	0.5	pCi/L			OTW01	07/21/2014 1209 MB
Polonium 210	ND	pCi/L		1	OTW01	07/16/2014 000 MB
Polonium 210 (Suspended) Precision (±)	NA	pCi/L			OTW01	07/16/2014 000 MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/16/2014 1752 MB
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/16/2014 1752 MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1253 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1253 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-003  
**ClientSample ID:** P72048W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 3:00:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments


Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.69	s.u.			Field	06/24/2014 1500
Conductivity	1602	µmhos/cm			Field	06/24/2014 1500
Dissolved Oxygen	1.74	mg/L			Field	06/24/2014 1500
Dissolved Oxygen (pct)	16.9	%			Field	06/24/2014 1500
Turbidity	0.13	NTU			Field	06/24/2014 1500
Temperature	12.5	°C			Field	06/24/2014 1500
Oxygen Reduction Potential (ORP)	-51	mV			Field	06/24/2014 1500
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	471	mg/L		5	SM 2320B	06/26/2014 1712 BT
Alkalinity, Bicarbonate as HCO <sub>3</sub>	527	mg/L		5	SM 2320B	06/26/2014 1712 BT
Alkalinity, Carbonate as CO <sub>3</sub>	24	mg/L		5	SM 2320B	06/26/2014 1712 BT
Chloride	6	mg/L		1	EPA 300.0	06/27/2014 1510 AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	06/26/2014 1712 BT
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/27/2014 1248 CAW
Sulfate	301	mg/L		1	EPA 300.0	06/27/2014 1510 AMB
Calcium	4	mg/L		1	EPA 200.7	06/26/2014 1618 DG
Magnesium	1	mg/L		1	EPA 200.7	06/26/2014 1618 DG
Potassium	5	mg/L		1	EPA 200.7	06/26/2014 1618 DG
Sodium	376	mg/L		1	EPA 200.7	06/26/2014 1618 DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	07/02/2014 1204 CAW
Silica as SiO <sub>2</sub>	8.9	mg/L		0.1	EPA 200.7	06/26/2014 1618 DG
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	06/26/2014 1712 BT
Electrical Conductivity	1600	µmhos/cm		5	SM 2510B	06/26/2014 000 BT
Total Dissolved Solids (180)	1010	mg/L		10	SM 2540	06/26/2014 1452 BM
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/26/2014 1345 CAW
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	07/14/2014 000 BC
Sodium Adsorption Ratio	42.1			0.1	Calculation	07/14/2014 830 BC

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-003  
**ClientSample ID:** P72048W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 3:00:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	16.77	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Anion Sum	15.88	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Cation-Anion Balance (± 5%)	2.72	%		0.01	SM 1030E	07/14/2014 830 BC
Solids, Total Dissolved (Calc)	980	mg/L		10	SM 1030E	07/14/2014 830 BC
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/26/2014 1618 DG
Arsenic	ND	mg/L		0.005	EPA 200.8	06/25/2014 2016 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/25/2014 2016 MS
Boron	0.2	mg/L		0.1	EPA 200.7	06/26/2014 1618 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/25/2014 2016 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/26/2014 1618 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/25/2014 2016 MS
Iron	0.08	mg/L		0.05	EPA 200.7	06/26/2014 1618 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/25/2014 2016 MS
Manganese	ND	mg/L		0.02	EPA 200.7	06/26/2014 1618 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/01/2014 1414 CJB
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/25/2014 2016 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/26/2014 1618 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/25/2014 2016 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/25/2014 2016 MS
Uranium	0.0013	mg/L		0.0003	EPA 200.8	06/25/2014 2016 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/25/2014 2016 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/26/2014 1618 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/09/2014 049 MS
<b>Metals - Total</b>						
Iron	0.21	mg/L		0.05	EPA 200.7	06/30/2014 1503 DG
Manganese	ND	mg/L		0.02	EPA 200.7	06/30/2014 1503 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2014 1418 CJB

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-003  
**ClientSample ID:** P72048W  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/24/2014 3:00:00 PM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.2	pCi/L		2	SM 7110B	07/14/2014 2228	MB
Gross Alpha Precision (±)	1.4	pCi/L			SM 7110B	07/14/2014 2228	MB
Gross Beta	3.3	pCi/L		3	SM 7110B	07/14/2014 2228	MB
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	07/14/2014 2228	MB
Gross Gamma	ND	pCi/L		50	EPA 901.1M	08/14/2014 1325	MB
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	08/14/2014 1325	MB
Lead 210	ND	pCi/L		1	OTW01	07/11/2014 915	MB
Lead 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 915	MB
Polonium 210	ND	pCi/L		1	OTW01	07/11/2014 1519	MB
Polonium 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 1519	MB
Radium 226	0.2	pCi/L		0.2	SM 7500 Ra-B	07/11/2014 1338	MB
Radium 226 Precision (±)	0.1	pCi/L			SM 7500 Ra-B	07/11/2014 1338	MB
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2014 1416	MB
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2014 1416	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/10/2014 817	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/10/2014 817	MB
<b>Radionuclides - Suspended</b>							
Lead 210	1.3	pCi/L		1	OTW01	07/21/2014 1209	MB
Lead 210 (Suspended) Precision (±)	0.5	pCi/L			OTW01	07/21/2014 1209	MB
Polonium 210	ND	pCi/L		1	OTW01	07/16/2014 000	MB
Polonium 210 (Suspended) Precision (±)	NA	pCi/L			OTW01	07/16/2014 000	MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/16/2014 1752	MB
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/16/2014 1752	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1656	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1656	MB

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-005  
**ClientSample ID:** ABWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 11:00:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

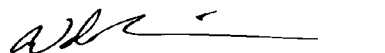
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.74	s.u.			Field	06/25/2014 1100
Conductivity	1605	µmhos/cm			Field	06/25/2014 1100
Dissolved Oxygen	2.07	mg/L			Field	06/25/2014 1100
Dissolved Oxygen (pct)	19.7	%			Field	06/25/2014 1100
Turbidity	0.61	NTU			Field	06/25/2014 1100
Temperature	13.0	°C			Field	06/25/2014 1100
Oxygen Reduction Potential (ORP)	-113	mV			Field	06/25/2014 1100
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	651	mg/L		5	SM 2320B	06/26/2014 1737 BT
Alkalinity, Bicarbonate as HCO <sub>3</sub>	726	mg/L		5	SM 2320B	06/26/2014 1737 BT
Alkalinity, Carbonate as CO <sub>3</sub>	33	mg/L		5	SM 2320B	06/26/2014 1737 BT
Chloride	2	mg/L		1	EPA 300.0	06/27/2014 1538 AMB
Fluoride	0.5	mg/L		0.1	SM 4500FC	06/26/2014 1737 BT
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/27/2014 1258 CAW
Sulfate	193	mg/L		1	EPA 300.0	06/27/2014 1538 AMB
Calcium	4	mg/L		1	EPA 200.7	06/26/2014 1622 DG
Magnesium	2	mg/L		1	EPA 200.7	06/26/2014 1622 DG
Potassium	4	mg/L		1	EPA 200.7	06/26/2014 1622 DG
Sodium	398	mg/L		1	EPA 200.7	06/26/2014 1622 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	07/02/2014 1206 CAW
Silica as SiO <sub>2</sub>	8.2	mg/L		0.1	EPA 200.7	06/26/2014 1622 DG
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	06/26/2014 1737 BT
Electrical Conductivity	1600	µmhos/cm		5	SM 2510B	06/26/2014 000 BT
Total Dissolved Solids (180)	1010	mg/L		10	SM 2540	06/26/2014 1455 BM
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/26/2014 1347 CAW
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	07/14/2014 000 BC
Sodium Adsorption Ratio	41.9			0.1	Calculation	07/14/2014 830 BC

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

  
Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-005  
**ClientSample ID:** ABWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 11:00:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Data Quality</b>						
Cation Sum	17.75	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Anion Sum	17.11	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Cation-Anion Balance (± 5%)	1.84	%		0.01	SM 1030E	07/14/2014 830 BC
Solids, Total Dissolved (Calc)	1000	mg/L		10	SM 1030E	07/14/2014 830 BC
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	06/26/2014 1622 DG
Arsenic	0.030	mg/L		0.005	EPA 200.8	06/25/2014 2043 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/25/2014 2043 MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/26/2014 1622 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/25/2014 2043 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/26/2014 1622 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/25/2014 2043 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/26/2014 1622 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/25/2014 2043 MS
Manganese	ND	mg/L		0.02	EPA 200.7	06/26/2014 1622 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/01/2014 1423 CJB
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/25/2014 2043 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/26/2014 1622 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/25/2014 2043 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/25/2014 2043 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2014 2043 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/25/2014 2043 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/26/2014 1622 DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	07/09/2014 058 MS
<b>Metals - Total</b>						
Iron	ND	mg/L		0.05	EPA 200.7	06/30/2014 1514 DG
Manganese	ND	mg/L		0.02	EPA 200.7	06/30/2014 1514 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2014 1422 CJB


## These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
M Value exceeds Monthly Ave or MCL or is less than LCL  
O Outside the Range of Dilutions  
X Matrix Effect

C Calculated Value  
H Holding times for preparation or analysis exceeded  
L Analyzed by 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

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-005  
**ClientSample ID:** ABWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 11:00:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Radionuclides - Dissolved

Gross Alpha	2.5	pCi/L		2	SM 7110B	07/15/2014 1031 MB
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	07/15/2014 1031 MB
Gross Beta	4.8	pCi/L		3	SM 7110B	07/15/2014 1031 MB
Gross Beta Precision (±)	2.0	pCi/L			SM 7110B	07/15/2014 1031 MB
Gross Gamma	ND	pCi/L		50	EPA 901.1M	08/14/2014 1325 MB
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	08/14/2014 1325 MB
Lead 210	ND	pCi/L		1	OTW01	07/11/2014 915 MB
Lead 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 915 MB
Polonium 210	ND	pCi/L		1	OTW01	07/11/2014 1519 MB
Polonium 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 1519 MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2014 1552 MB
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2014 1552 MB
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2014 2018 MB
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2014 2018 MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1253 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1253 MB

## Radionuclides - Suspended

Lead 210	1.1	pCi/L		1	OTW01	07/21/2014 1209 MB
Lead 210 (Suspended) Precision (±)	0.4	pCi/L			OTW01	07/21/2014 1209 MB
Polonium 210	ND	pCi/L		1	OTW01	07/16/2014 000 MB
Polonium 210 (Suspended) Precision (±)	NA	pCi/L			OTW01	07/16/2014 000 MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/16/2014 1752 MB
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/16/2014 1752 MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1656 MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1656 MB

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-006  
**ClientSample ID:** FD-ABWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 11:05:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH	8.74	s.u.			Field	06/25/2014 1105
Conductivity	1605	µmhos/cm			Field	06/25/2014 1105
Dissolved Oxygen	2.07	mg/L			Field	06/25/2014 1105
Dissolved Oxygen (pct)	19.7	%			Field	06/25/2014 1105
Turbidity	0.61	NTU			Field	06/25/2014 1105
Temperature	13.0	°C			Field	06/25/2014 1105
Oxygen Reduction Potential (ORP)	-113	mV			Field	06/25/2014 1105
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	626	mg/L		5	SM 2320B	06/26/2014 1749 BT
Alkalinity, Bicarbonate as HCO <sub>3</sub>	696	mg/L		5	SM 2320B	06/26/2014 1749 BT
Alkalinity, Carbonate as CO <sub>3</sub>	33	mg/L		5	SM 2320B	06/26/2014 1749 BT
Chloride	2	mg/L		1	EPA 300.0	06/27/2014 1715 AMB
Fluoride	0.4	mg/L		0.1	SM 4500FC	06/26/2014 1749 BT
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/27/2014 1259 CAW
Sulfate	194	mg/L		1	EPA 300.0	06/27/2014 1715 AMB
Calcium	3	mg/L		1	EPA 200.7	06/26/2014 1625 DG
Magnesium	2	mg/L		1	EPA 200.7	06/26/2014 1625 DG
Potassium	4	mg/L		1	EPA 200.7	06/26/2014 1625 DG
Sodium	396	mg/L		1	EPA 200.7	06/26/2014 1625 DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	07/02/2014 1207 CAW
Silica as SiO <sub>2</sub>	8.1	mg/L		0.1	EPA 200.7	06/26/2014 1625 DG
<b>General Parameters</b>						
pH	8.7	s.u.		0.1	SM 4500 H B	06/26/2014 1749 BT
Electrical Conductivity	1600	µmhos/cm		5	SM 2510B	06/26/2014 000 BT
Total Dissolved Solids (180)	1010	mg/L		10	SM 2540	06/26/2014 1456 BM
Nitrogen, Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	06/26/2014 1348 CAW
Nitrogen, Nitrate (as N)	ND	mg/L		0.1	EPA 353.2	07/14/2014 000 BC
Sodium Adsorption Ratio	44.5			0.1	Calculation	07/14/2014 830 BC

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-006  
**ClientSample ID:** FD-ABWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 11:05:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Data Quality

Cation Sum	17.61	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Anion Sum	16.63	meq/L		0.01	SM 1030E	07/14/2014 830 BC
Cation-Anion Balance (± 5%)	2.84	%		0.01	SM 1030E	07/14/2014 830 BC
Solids, Total Dissolved (Calc)	980	mg/L		10	SM 1030E	07/14/2014 830 BC

## Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	06/26/2014 1625 DG
Arsenic	0.032	mg/L		0.005	EPA 200.8	06/25/2014 2048 MS
Barium	ND	mg/L		0.5	EPA 200.8	06/25/2014 2048 MS
Boron	0.3	mg/L		0.1	EPA 200.7	06/26/2014 1625 DG
Cadmium	ND	mg/L		0.002	EPA 200.8	06/25/2014 2048 MS
Chromium	ND	mg/L		0.01	EPA 200.7	06/26/2014 1625 DG
Copper	ND	mg/L		0.01	EPA 200.8	06/25/2014 2048 MS
Iron	ND	mg/L		0.05	EPA 200.7	06/26/2014 1625 DG
Lead	ND	mg/L		0.02	EPA 200.8	06/25/2014 2048 MS
Manganese	ND	mg/L		0.02	EPA 200.7	06/26/2014 1625 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/01/2014 1425 CJB
Molybdenum	ND	mg/L		0.02	EPA 200.8	06/25/2014 2048 MS
Nickel	ND	mg/L		0.01	EPA 200.7	06/26/2014 1625 DG
Selenium	ND	mg/L		0.005	EPA 200.8	06/25/2014 2048 MS
Silver	ND	mg/L		0.003	EPA 200.8	06/25/2014 2048 MS
Uranium	ND	mg/L		0.0003	EPA 200.8	06/25/2014 2048 MS
Vanadium	ND	mg/L		0.02	EPA 200.8	06/25/2014 2048 MS
Zinc	ND	mg/L		0.01	EPA 200.7	06/26/2014 1625 DG

## Metals - Suspended

Uranium	ND	mg/L		0.0003	EPA 200.8	07/09/2014 102 MS
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## Metals - Total

Iron	ND	mg/L		0.05	EPA 200.7	06/30/2014 1516 DG
Manganese	ND	mg/L		0.02	EPA 200.7	06/30/2014 1516 DG
Mercury	ND	mg/L		0.001	EPA 245.1	07/03/2014 1424 CJB

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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## Sample Analysis Report

**Company:** Western Water Consultants  
1849 Terra  
Sheridan, WY 82801

**Date Reported** 8/14/2014  
**Report ID** S1406483001

**ProjectName:** Kendrick  
**Lab ID:** S1406483-006  
**ClientSample ID:** FD-ABWELL01  
**COC:** 151530

**WorkOrder:** S1406483  
**CollectionDate:** 6/25/2014 11:05:00 AM  
**DateReceived:** 6/25/2014 2:25:00 PM  
**FieldSampler:** RF  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	2.4	pCi/L		2	SM 7110B	07/15/2014 1031	MB
Gross Alpha Precision (±)	1.5	pCi/L			SM 7110B	07/15/2014 1031	MB
Gross Beta	4.2	pCi/L		3	SM 7110B	07/15/2014 1031	MB
Gross Beta Precision (±)	2.1	pCi/L			SM 7110B	07/15/2014 1031	MB
Gross Gamma	ND	pCi/L		50	EPA 901.1M	08/14/2014 1325	MB
Gross Gamma Precision (±)	NA	pCi/L			EPA 901.1M	08/14/2014 1325	MB
Lead 210	ND	pCi/L		1	OTW01	07/11/2014 915	MB
Lead 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 915	MB
Polonium 210	ND	pCi/L		1	OTW01	07/11/2014 1519	MB
Polonium 210 (Dissolved) Precision (±)	NA	pCi/L			OTW01	07/11/2014 1519	MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/11/2014 1552	MB
Radium 226 Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/11/2014 1552	MB
Radium 228	ND	pCi/L		1	Ga-Tech	07/23/2014 2319	MB
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	07/23/2014 2319	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1253	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1253	MB
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	07/21/2014 1209	MB
Lead 210 (Suspended) Precision (±)	NA	pCi/L			OTW01	07/21/2014 1209	MB
Polonium 210	ND	pCi/L		1	OTW01	07/16/2014 000	MB
Polonium 210 (Suspended) Precision (±)	NA	pCi/L			OTW01	07/16/2014 000	MB
Radium 226	ND	pCi/L		0.2	SM 7500 Ra-B	07/16/2014 1752	MB
Radium 226 (Suspended) Precision (±)	NA	pCi/L			SM 7500 Ra-B	07/16/2014 1752	MB
Thorium 230	ND	pCi/L		0.2	ACW10	07/16/2014 1656	MB
Thorium 230 Precision (±)	NA	pCi/L			ACW10	07/16/2014 1656	MB

## These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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 or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

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