



Thursday, February 23, 2012

Phil Cavendor  
AUC, LLC  
1536 Cole Blvd  
Suite 330  
Lakewood, CO 80401

RE: Reno Creek Project  
Orde

r No.: S1201176

Dear Phil Cavendor:

Inter-Mountain Laboratories received sample UM3R-002-120112 on January 12, 2012.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Lacey Ketron  
Project Manager

xc: File  
Encl.



Date: 2/23/2012

**CLIENT:** AUC LLC  
**Project:** Reno Creek Project  
**Lab Order:** S1201176

**CASE NARRATIVE**  
**Report ID:** S1201176001

Sample UM3R-002-120112 was received on January 12, 2012.

All samples were received and analyzed within the EPA recommended holding times, except those noted in this case narrative. Samples were analyzed using the methods outlined in the following references:

- U.S.E.P.A. 600 "Methods for Chemical Analysis of Water and Wastes", 1993
- "Standard Methods For The Examination of Water and Wastewater", 20th ed., 1998
- Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition
- Methods indicated with the Monday, March 12, 2007 Federal Register, 40 CFR Part 122, 136 et al.

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

For the purposes of this report, the Reporting Limit (RL) is the Practical Quantitation Limit (PQL).

Radon 222 was analyzed through ALS Laboratory Group Certification #: CO00078.

Qualifiers by sample

- S1201192-001 - Dissolved Metals/Chromium - RPD outside accepted recovery limits
- S1201176-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- LCS-R79246 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- MB-R79246 - General Parameters/Radon-222 - Analyzed by a contract laboratory

Reviewed by:

Lacey Ketron, Water Lab Supervisor



### Sample Analysis Report

**Company:** AUC LLC  
 1536 Cole Blvd  
 Lakewood, CO 80401

**ProjectName:** Reno Creek Project  
**Lab ID:** S1201176-001  
**ClientSample ID:** UM3R-002-120112  
**COC:** RC 08171

**Date Reported:** 2/23/2012  
**Report ID:** S1201176001

**WorkOrder:** S1201176  
**CollectionDate:** 1/12/2012 11:30:00 AM  
**DateReceived:** 1/12/2012 2:48:00 PM  
**FieldSampler:** TN  
**Matrix:** Groundwater

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH Reading 1	11.45	s.u.			Field	1/12/2012 11:30:00 AM
pH Reading 2	11.44	s.u.			Field	1/12/2012 11:30:00 AM
pH Reading 3	11.46	s.u.			Field	1/12/2012 11:30:00 AM
Conductivity Reading 1	1390	µmhos/cm			Field	1/12/2012 11:30:00 AM
Conductivity Reading 2	1383	µmhos/cm			Field	1/12/2012 11:30:00 AM
Conductivity Reading 3	1384	µmhos/cm			Field	1/12/2012 11:30:00 AM
Turbidity Reading 1	18.5	NTU			Field	1/12/2012 11:30:00 AM
Turbidity Reading 2	18.5	NTU			Field	1/12/2012 11:30:00 AM
Turbidity Reading 3	18.2	NTU			Field	1/12/2012 11:30:00 AM
Dissolved Oxygen Reading 1	4.90	mg/L			Field	1/12/2012 11:30:00 AM
Dissolved Oxygen Reading 2	5.03	mg/L			Field	1/12/2012 11:30:00 AM
Dissolved Oxygen Reading 3	5.09	mg/L			Field	1/12/2012 11:30:00 AM
Temperature Reading 1	7.24	°C			Field	1/12/2012 11:30:00 AM
Temperature Reading 2	7.36	°C			Field	1/12/2012 11:30:00 AM
Temperature Reading 3	7.15	°C			Field	1/12/2012 11:30:00 AM
Oxygen Reduction Potential Reading	-6.3	mV			Field	1/12/2012 11:30:00 AM
Oxygen Reduction Potential Reading	-45.7	mV			Field	1/12/2012 11:30:00 AM
Oxygen Reduction Potential Reading	-58.7	mV			Field	1/12/2012 11:30:00 AM
Purge Rate Reading 1	250	ml/min			Field	1/12/2012 11:30:00 AM
Purge Rate Reading 2	250	ml/min			Field	1/12/2012 11:30:00 AM
Purge Rate Reading 3	250	ml/min			Field	1/12/2012 11:30:00 AM
Water Level Reading 1	320.90	Ft			Field	1/12/2012 11:30:00 AM
Water Level Reading 2	321.10	Ft			Field	1/12/2012 11:30:00 AM
Water Level Reading 3	321.20	Ft			Field	1/12/2012 11:30:00 AM

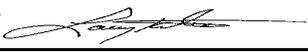
These results apply only to the samples tested.

#### RL - Reporting Limit

**Qualifiers:**

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

- B Analyte detected in the associated Method Blank
- E Value 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



Sample Analysis Report

Company: AUC LLC
1536 Cole Blvd
Lakewood, CO 80401
ProjectName: Reno Creek Project
Lab ID: S1201176-001
ClientSample ID: UM3R-002-120112
COC: RC 08171

Date Reported: 2/23/2012
Report ID: S1201176001
WorkOrder: S1201176
CollectionDate: 1/12/2012 11:30:00 AM
DateReceived: 1/12/2012 2:48:00 PM
FieldSampler: TN
Matrix: Groundwater

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum).

These results apply only to the samples tested.

RL - Reporting Limit

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

- B Analyte detected in the associated Method Blank, E Value 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]
Lacey Ketron, Water Lab Supervisor



### Sample Analysis Report

**Company:** AUC LLC  
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 Lakewood, CO 80401

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**CollectionDate:** 1/12/2012 11:30:00 AM  
**DateReceived:** 1/12/2012 2:48:00 PM  
**FieldSampler:** TN  
**Matrix:** Groundwater

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Metals - Dissolved</b>						
Aluminum	ND	mg/L		0.1	EPA 200.7	1/16/2012 11:55:03 AM DG
Arsenic	0.022	mg/L		0.001	EPA 200.8	1/13/2012 12:28:01 PM MS
Barium	ND	mg/L		0.1	EPA 200.8	1/13/2012 12:28:01 PM MS
Boron	ND	mg/L		0.1	EPA 200.7	1/16/2012 11:55:03 AM DG
Cadmium	ND	mg/L		0.001	EPA 200.8	1/13/2012 12:28:01 PM MS
Chromium	ND	mg/L		0.01	EPA 200.7	1/16/2012 11:55:03 AM DG
Copper	ND	mg/L		0.01	EPA 200.8	1/13/2012 12:28:01 PM MS
Iron	ND	mg/L		0.05	EPA 200.7	1/16/2012 11:55:03 AM DG
Lead	ND	mg/L		0.01	EPA 200.8	1/13/2012 12:28:01 PM MS
Manganese	ND	mg/L		0.01	EPA 200.7	1/16/2012 11:55:03 AM DG
Mercury	ND	mg/L		0.001	EPA 245.1	1/18/2012 10:05:06 AM BK
Molybdenum	0.02	mg/L		0.01	EPA 200.8	1/13/2012 12:28:01 PM MS
Nickel	ND	mg/L		0.05	EPA 200.7	1/16/2012 11:55:03 AM DG
Selenium	ND	mg/L		0.005	EPA 200.8	1/13/2012 12:28:01 PM MS
Uranium	0.0008	mg/L		0.0003	EPA 200.8	1/13/2012 12:28:01 PM MS
Vanadium	ND	mg/L		0.1	EPA 200.8	1/13/2012 12:28:01 PM MS
Zinc	ND	mg/L		0.01	EPA 200.7	1/16/2012 11:55:03 AM DG
<b>Metals - Suspended</b>						
Uranium	ND	mg/L		0.0003	EPA 200.8	1/25/2012 5:37:00 PM MS
<b>Metals - Total</b>						
Iron	0.08	mg/L		0.05	EPA 200.7	1/17/2012 1:02:17 PM DG
Manganese	ND	mg/L		0.01	EPA 200.7	1/17/2012 1:02:17 PM DG

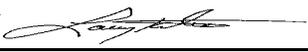
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- B Analyte detected in the associated Method Blank
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Reviewed by:   
 Lacey Ketron, Water Lab Supervisor



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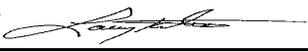
#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Radionuclides - Dissolved</b>							
Gross Alpha	ND	pCi/L		3	SM 7110B	1/31/2012 6:48:00 PM	SH
Gross Alpha Precision (±)	NA	pCi/L			SM 7110B	1/31/2012 6:48:00 PM	SH
Gross Beta	21.0	pCi/L		3	SM 7110B	1/31/2012 6:48:00 PM	SH
Gross Beta Precision (±)	2.4	pCi/L			SM 7110B	1/31/2012 6:48:00 PM	SH
Lead 210	ND	pCi/L		1	OTW01	2/8/2012 2:19:00 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	2/8/2012 2:19:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	2/7/2012 3:14:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	2/7/2012 3:14:00 PM	SH
Radium 226	0.2	pCi/L		0.2	SM 7500-Ra B	1/31/2012 3:22:00 PM	SH
Radium 226 Precision (±)	0.1	pCi/L			SM 7500-Ra B	1/31/2012 3:22:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	1/30/2012 5:19:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	1/30/2012 5:19:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	2/3/2012 8:25:00 AM	WL
Thorium 230 Precision (±)	NA	pCi/L			ACW10	2/3/2012 8:25:00 AM	WL
<b>Radionuclides - Suspended</b>							
Lead 210	ND	pCi/L		1	OTW01	2/17/2012 11:22:00 AM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	2/17/2012 11:22:00 AM	SH
Polonium 210	ND	pCi/L		1	OTW01	2/7/2012 3:14:00 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	2/7/2012 3:14:00 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	2/2/2012 11:23:00 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	2/2/2012 11:23:00 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	2/13/2012 9:08:00 AM	WL
Thorium 230 Precision (±)	NA	pCi/L			ACW10	2/13/2012 9:08:00 AM	WL
<b>Radionuclides - Total</b>							
Radon 222	ND	pCi/L	L	50	SM7500-RN	1/13/2012	LJK
Radon 222 Precision (±)	NA	pCi/L	L		SM7500-RN	1/13/2012	LJK

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:   
 Lacey Ketron, Water Lab Supervisor



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Alkalinity**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	01/16/12 16:13	Alkalinity, Total (As CaCO3)	ND	5					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	01/16/12 16:02	Alkalinity, Total (As CaCO3)	591	5	601		98.3	90 - 110	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78940	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201158-003AD	01/16/12 19:52	Alkalinity, Bicarbonate as HCO3	448	5	449	0.257		20	
		Alkalinity, Carbonate as CO3	58	5	57	2.84		20	
		Alkalinity, Total (As CaCO3)	464	5	462	0.375		20	

**Conductivity**

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 78959	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	01/17/12 9:26	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 78959	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	01/17/12 9:24	Electrical Conductivity	1100	5	1120		97.5	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 78959	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201158-005AD	01/17/12 10:03	Electrical Conductivity	2100	5	2040	2.94		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Dissolved Mercury by EPA 245.1 - Water**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 79015	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	01/18/12 7:54	Mercury	ND	0.001					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 79015	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	01/18/12 7:52	Mercury	0.002	0.001	0.002		101	85 - 115	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 79015	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201168-007C	01/18/12 9:55	Mercury	0.002	0.001	0.00244	ND	99.4	70 - 130	

Sample Type **MSD** Units: mg/L

Sample ID	RunNo: 79015	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1201168-007C	01/18/12 9:57	Mercury	0.002	0.001	0.002	0.705		20	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 79015	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201168-007C	01/18/12 9:53	Mercury	ND	0.001	ND			20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Dissolved Metals by ICP - EPA 200.7 - Water**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78936	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	01/16/12 11:07	Aluminum	ND	0.1					
		Boron	ND	0.1					
		Chromium	ND	0.01					
		Iron	ND	0.05					
		Manganese	ND	0.02					
		Nickel	ND	0.01					
		Zinc	ND	0.01					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78936	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	01/16/12 11:09	Aluminum	1.0	0.1	1		102	85 - 115	
		Boron	1.0	0.1	1		99.7	85 - 115	
		Chromium	1.01	0.01	1		101	85 - 115	
		Iron	1.03	0.05	1		103	85 - 115	
		Manganese	1.05	0.02	1		105	85 - 115	
		Nickel	1.06	0.01	1		106	85 - 115	
		Zinc	1.05	0.01	1		105	85 - 115	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 78936	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201192-002AS	01/16/12 12:11	Aluminum	306	0.1	275	ND	111	70 - 130	
		Boron	280	0.1	275	4.1	100	70 - 130	
		Chromium	277	0.01	275	0.12	101	70 - 130	
		Iron	274	0.05	275	ND	99.7	70 - 130	
		Manganese	273	0.02	275	0.29	99.2	70 - 130	
		Nickel	272	0.01	275	ND	99.0	70 - 130	
		Zinc	272	0.01	275	ND	99.0	70 - 130	

Sample Type **MSD** Units: mg/L

Sample ID	RunNo: 78936	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1201192-002ASD	01/16/12 12:13	Aluminum	303	0.1	306	0.900		20	
		Boron	284	0.1	280	1.29		20	
		Chromium	277	0.01	277	0.195		20	
		Iron	274	0.05	274	0.122		20	
		Manganese	273	0.02	273	0.0824		20	
		Nickel	273	0.01	272	0.198		20	
		Zinc	274	0.01	272	0.771		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Dissolved Metals by ICP - EPA 200.7 - Water**

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78936	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201192-001AD	01/16/12 12:06	Aluminum	ND	0.1	ND			20	
		Boron	4.4	0.1	5.2	14.9		20	
		Chromium	0.06	0.01	0.14	60.7		20	R
		Iron	ND	0.05	ND			20	
		Manganese	0.26	0.02	0.27	1.89		20	
		Nickel	ND	0.01	ND			20	
		Zinc	ND	0.01	ND			20	

**Dissolved Metals by ICPMS EPA 200.8 - Water**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78877	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	01/13/12 11:11	Arsenic	ND	0.005					
		Barium	ND	0.5					
		Cadmium	ND	0.002					
		Copper	ND	0.01					
		Lead	ND	0.02					
		Molybdenum	ND	0.02					
		Selenium	ND	0.005					
		Uranium	ND	0.001					
		Vanadium	ND	0.02					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78877	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	01/13/12 11:07	Arsenic	0.100	0.005	0.1		99.5	85 - 115	
		Barium	ND	0.5	0.1		99.9	85 - 115	
		Cadmium	0.099	0.002	0.1		99.1	85 - 115	
		Copper	0.10	0.01	0.1		99.7	85 - 115	
		Lead	0.10	0.02	0.1		98.0	85 - 115	
		Molybdenum	0.10	0.02	0.1		100	85 - 115	
		Selenium	0.101	0.005	0.1		101	85 - 115	
		Uranium	0.098	0.001	0.1		97.7	85 - 115	
		Vanadium	0.10	0.02	0.1		100	85 - 115	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits		



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
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**Date:** 2/23/2012  
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**Dissolved Metals by ICPMS EPA 200.8 - Water**

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 78877	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201175-001DS	01/13/12 12:20	Arsenic	1.15	0.005	1.1	0.027	102	70 - 130	
		Barium	1.2	0.5	1.1	ND	104	70 - 130	
		Cadmium	1.10	0.002	1.1	ND	99.8	70 - 130	
		Copper	1.09	0.01	1.1	ND	98.7	70 - 130	
		Lead	1.03	0.02	1.1	ND	93.4	70 - 130	
		Molybdenum	1.10	0.02	1.1	ND	99.9	70 - 130	
		Selenium	1.16	0.005	1.1	ND	105	70 - 130	
		Uranium	1.07	0.001	1.1	0.002	97.2	70 - 130	
		Vanadium	1.13	0.02	1.1	ND	103	70 - 130	

Sample Type **MSD** Units: mg/L

Sample ID	RunNo: 78877	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1201175-001DMSD	01/13/12 12:24	Arsenic	1.15	0.005	1.15	0.137		20	
		Barium	1.2	0.5	1.2	0.632		20	
		Cadmium	1.10	0.002	1.10	0.570		20	
		Copper	1.09	0.01	1.09	0.441		20	
		Lead	1.03	0.02	1.03	0.309		20	
		Molybdenum	1.11	0.02	1.10	0.496		20	
		Selenium	1.16	0.005	1.16	0.367		20	
		Uranium	1.08	0.001	1.07	0.761		20	
		Vanadium	1.10	0.02	1.13	2.44		20	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78877	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201175-001DD	01/13/12 12:16	Arsenic	0.027	0.005	0.027	0.459		20	
		Barium	ND	0.5	ND			20	
		Cadmium	ND	0.002	ND			20	
		Copper	ND	0.01	ND			20	
		Lead	ND	0.02	ND			20	
		Molybdenum	ND	0.02	ND			20	
		Selenium	ND	0.005	ND			20	
		Uranium	0.002	0.001	0.002	0.319		20	
		Vanadium	ND	0.02	ND			20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Fluoride by SM 4500**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	01/16/12 16:13	Fluoride	ND	0.1					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	01/16/12 16:02	Fluoride	3.1	0.1	2.96		103	90 - 110	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 78940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201168-004ASPK	01/16/12 21:54	Fluoride	3.0	0.1	2.5	ND	119	80 - 120	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78940	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201144-007BD	01/16/12 18:24	Fluoride	3.5	0.1	4.0	13.5		20	

**Gross Alpha, Beta by SM 7110B**Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79465	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-030	01/31/12 18:48	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 79465	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-030	01/31/12 18:48	Gross Alpha (Dissolved)	84	2	73.6		115	83 - 133	
		Gross Beta (Dissolved)	133	3	126		106	88 - 115	

Sample Type **MS** Units: pCi/L

Sample ID	RunNo: 79465	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201176-001FMS	01/31/12 18:48	Gross Alpha (Dissolved)	137	2	147	ND	93.2	48 - 153	
		Gross Beta (Dissolved)	306	4	252	21	113	60 - 140	

Sample Type **DUP** Units: pCi/L

Sample ID	RunNo: 79465	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112368-001FDUP	01/31/12 18:48	Gross Alpha (Dissolved)	208	5	216	4.02		20	
		Gross Beta (Dissolved)	63	8	62	1.39		20	

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	L Analyzed by a contract laboratory	ND Not Detected at the Reporting Limit
	O Outside the Range of Dilutions	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits	



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Anions by ION Chromatography**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78895	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	01/13/12 9:10	Chloride	ND	1					
		Sulfate	ND	1					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78895	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	01/13/12 8:47	Chloride	32	1	30		105	90 - 110	
		Sulfate	148	1	150		98.8	90 - 110	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 78895	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201039-001ASPK	01/13/12 22:28	Chloride	115	1	80	29	108	80 - 120	
		Sulfate	1110	1	640	376	115	80 - 120	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78895	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201039-001A	01/13/12 22:16	Chloride	30	1	29	4.29		20	
		Sulfate	379	1	376	0.751		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Cations by ICP (Method 200.7)**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78935	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	01/16/12 11:07	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample ID	RunNo: 79195	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	01/24/12 8:15	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78935	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	01/16/12 11:11	Calcium	39	1	40		96.9	85 - 115	
		Magnesium	39	1	40		96.2	85 - 115	
		Potassium	39	1	40		97.5	85 - 115	
		Sodium	40	1	40		98.7	85 - 115	

Sample ID	RunNo: 79195	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	01/24/12 8:19	Calcium	40	1	40		101	85 - 115	
		Magnesium	40	1	40		99.0	85 - 115	
		Potassium	39	1	40		96.7	85 - 115	
		Sodium	39	1	40		98.2	85 - 115	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 79195	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201303-002AS	01/24/12 8:50	Calcium	53	1	50	1	104	70 - 130	
		Magnesium	51	1	50	ND	102	70 - 130	
		Potassium	57	1	50	2	110	70 - 130	
		Sodium	203	1	50	150	107	70 - 130	

Sample Type **MSD** Units: mg/L

Sample ID	RunNo: 79195	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1201303-002ASD	01/24/12 8:52	Calcium	54	1	53	1.85		20	
		Magnesium	52	1	51	1.48		20	
		Potassium	58	1	57	1.80		20	
		Sodium	206	1	203	1.36		20	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits		



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Cations by ICP (Method 200.7)**

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 79195	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201303-001AD	01/24/12 8:45	Calcium	6	1	6	3.46		20	
		Magnesium	3	1	3	2.69		20	
		Potassium	11	1	11	4.28		20	
		Sodium	800	1	763	4.82		20	

**Nitrogen, Ammonia (as N)**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 79139	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	01/20/12 15:55	Nitrogen, Ammonia (As N)	ND	0.1					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 79139	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	01/20/12 15:57	Nitrogen, Ammonia (As N)	9.4	0.1	10		93.7	90 - 110	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 79139	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201214-001C	01/20/12 16:12	Nitrogen, Ammonia (As N)	9.0	0.1	10	ND	90.0	80 - 120	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 79139	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201214-001C	01/20/12 16:11	Nitrogen, Ammonia (As N)	ND	0.1	ND			20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Nitrogen, Nitrate-Nitrite (as N)**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	01/13/12 15:21	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	01/13/12 15:23	Nitrogen, Nitrate-Nitrite (as N)	2.2	0.1	2.31		94.9	90 - 110	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 78887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201175-001C	01/13/12 15:39	Nitrogen, Nitrate-Nitrite (as N)	10.4	0.1	10	ND	104	80 - 120	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78887	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201175-001C	01/13/12 15:38	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1	ND			20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Lead 210 and Polonium 210**Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-026	02/17/12 11:22	Lead 210 (Dissolved)	ND	1					
		Lead 210 (Suspended)	ND	1					

Sample ID	RunNo: 79941	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-026	02/07/12 15:14	Polonium 210 (Dissolved)	ND	1					
		Polonium 210 (Suspended)	ND	1					

Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 79940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-026	02/17/12 11:22	Lead 210 (Dissolved)	15	1	12.8		114	67.6 - 131	
		Lead 210 (Suspended)	15	1	12.8		114	60.3 - 141	

Sample ID	RunNo: 79941	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-026	02/07/12 15:14	Polonium 210 (Dissolved)	7	1	11.7		56.0	35.1 - 175	
		Polonium 210 (Suspended)	7	1	11.7		56.0	48.6 - 156	

Sample Type **MS** Units: pCi/L

Sample ID	RunNo: 79940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
TAP WATER MS	02/08/12 14:19	Lead 210 (Dissolved)	14	1	12.8	ND	106	66 - 133	

Sample ID	RunNo: 79941	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
TAP WATER MS	02/07/12 15:14	Polonium 210 (Dissolved)	10	1	11.7	ND	83.6	20.9 - 160	

Sample Type **DUP** Units: pCi/L

Sample ID	RunNo: 79940	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201176-001FDUP	02/08/12 14:19	Lead 210 (Dissolved)	ND	1	ND			20	

Sample ID	RunNo: 79941	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201176-001FDUP	02/07/12 15:14	Polonium 210 (Dissolved)	ND	1	ND			20	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits		

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Radium 228**Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79394	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-024	01/30/12 17:19	Radium 228 (Dissolved)	ND	1					

Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 79394	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-024	01/30/12 17:19	Radium 228 (Dissolved)	9	1	9.87		90.3	74.9 - 122	

Sample Type **MS** Units: pCi/L

Sample ID	RunNo: 79394	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201158-006EMS	01/30/12 17:19	Radium 228 (Dissolved)	10	1	9.87	ND	105	48.4 - 167	

**Radium 226 by SM 7500**Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79453	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-025	01/31/12 12:49	Radium 226 (Dissolved)	ND	0.2					

Sample ID	RunNo: 79474	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-030	02/02/12 9:13	Radium 226 (Suspended)	ND	0.2					

Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 79453	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-025	01/31/12 12:49	Radium 226 (Dissolved)	5.1	0.2	5.06		101	62.5 - 125	

Sample ID	RunNo: 79474	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-030	02/02/12 9:13	Radium 226 (Suspended)	4.6	0.2	5.06		90.4	56.4 - 132	

Sample Type **MS** Units: pCi/L

Sample ID	RunNo: 79453	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201158-003EMS	01/31/12 12:49	Radium 226 (Dissolved)	4.8	0.2	5.06	ND	95.1	41.6 - 146	

Sample ID	RunNo: 79474	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201368-004EMS	02/02/12 9:13	Radium 226 (Dissolved)	5.8	0.2	5.06	0.8	97.5	41.6 - 146	

Sample Type **DUP** Units: pCi/L

Sample ID	RunNo: 79453	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201158-002EDUP	01/31/12 12:49	Radium 226 (Dissolved)	ND	0.2	ND			20	

Sample ID	RunNo: 79474	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201175-001FDUP	02/02/12 11:23	Radium 226 (Suspended)	ND	0.2	ND			20	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits		



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Thorium 230 in Water**

Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79510	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-023	02/03/12 8:25	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 79817	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-032	02/13/12 9:08	Thorium 230 (Suspended)	ND	0.2					

Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 79510	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-023	01/27/12 8:12	Thorium 230 (Dissolved)	11	0.2	12		85.5	67.1 - 134	
		Thorium 230 (Suspended)	11	0.2	12		85.5	69.2 - 127	

Sample ID	RunNo: 79817	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-032	02/13/12 9:08	Thorium 230 (Suspended)	12	0.2	12		98.4	69.2 - 127	

Sample Type **DUP** Units: pCi/L

Sample ID	RunNo: 79510	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201121-001F	02/02/12 9:08	Thorium 230 (Suspended)	ND	0.2	0.2			20	

Sample ID	RunNo: 79817	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201176-001F DUP	02/13/12 9:08	Thorium 230 (Suspended)	ND	0.2	ND			20	

**Radon 222 by SM7500-RN**

Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79246	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R79246	01/13/12 0:00	Radon-222	ND	50					L

Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 79246	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R79246	01/13/12 0:00	Radon-222	23200	100	22500		103	75 - 125	L

Sample Type **DUP** Units: pCi/L

Sample ID	RunNo: 79246	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201176-001A	01/13/12 0:00	Radon-222	ND	50	ND			20	L

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Silica as SiO2**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78937	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	01/16/12 11:07	Silica as SiO2	ND	0.1					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78937	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	01/16/12 11:09	Silica as SiO2	2.1	0.1	2.14		100	85 - 115	

**Solids By SM 2540**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78985	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	01/16/12 13:02	Total Dissolved Solids (180)	ND	10					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78985	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	01/16/12 13:03	Total Dissolved Solids (180)	230	10	226		100	90 - 110	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78985	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201144-005B	01/16/12 9:05	Total Dissolved Solids (180)	8380	10	8380	0		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Total (200.2) Metals by EPA 200.7 ICP - Water**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 78994	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-5780	01/17/12 12:53	Iron	ND	0.05					
		Manganese	ND	0.02					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 78994	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-5780	01/17/12 12:55	Iron	0.51	0.05	0.5		101	85 - 115	
		Manganese	0.20	0.02	0.2		99.0	85 - 115	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 78994	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201176-001ES	01/17/12 13:04	Iron	0.59	0.05	0.5	0.08	102	70 - 130	
		Manganese	0.20	0.02	0.2	ND	101	70 - 130	

Sample Type **MSD** Units: mg/L

Sample ID	RunNo: 78994	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1201176-001EMSD	01/17/12 13:13	Iron	0.59	0.05	0.59	0.203		20	
		Manganese	0.20	0.02	0.20	1.67		20	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 78994	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201175-001ED	01/17/12 12:59	Iron	0.95	0.05	0.94	1.28		20	
		Manganese	0.03	0.02	0.03	2.63		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1201176  
**Project:** Reno Creek Project

**Date:** 2/23/2012  
**Report ID:** S1201176001

**Suspended Natural Uranium**

Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 79277	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	01/25/12 12:18	Uranium Suspended	ND	0.0003					

Sample Type **LCS** Units: mg/L

Sample ID	RunNo: 79277	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	01/25/12 12:13	Uranium Suspended	0.0999	0.0003	0.1		99.9	85 - 115	

Sample Type **MS** Units: mg/L

Sample ID	RunNo: 79277	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112447-001FS	01/25/12 17:23	Uranium Suspended	1.12	0.0003	1.1	ND	102	70 - 130	

Sample Type **MSD** Units: mg/L

Sample ID	RunNo: 79277	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1112447-001FMSD	01/25/12 17:27	Uranium Suspended	1.11	0.0003	1.12	1.36		20	

Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 79277	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112447-001FD	01/25/12 17:18	Uranium Suspended	ND	0.0003	ND			20	

**pH Water**

Sample Type **LCS** Units: s.u.

Sample ID	RunNo: 78940	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	01/16/12 16:02	pH	8.8	0.1	8.48		103	90 - 110	

Sample Type **DUP** Units: s.u.

Sample ID	RunNo: 78940	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201158-003AD	01/16/12 19:52	pH	9.3	0.1	9.3	0.280		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits



**Inter-Mountain Labs**  
 Sheridan, WY and Gillette, WY  
 (307) 662-8645  
 1673 Terra Ave.  
 Sheridan, WY 82801  
 (307) 672-8045

**- CHAIN OF CUSTODY RECORD -**

This is a LEGAL DOCUMENT. All shaded fields must be completed. See reverse for instructions. #RC 08171

Client Name AUC LLC		Project Identification Reno Creek Project		Sampler (Signature/Printed) <i>Traci Nickerson</i>		Telephone #	
Report Address peavendor@auc-llc.com; trickerson@treccorp.com; jthriver@treccorp.com		Contact Name <i>Traci Nickerson</i>		ANALYSES / PARAMETERS		REMARKS	
Invoice Address AUC LLC 900 Weener Ct. Ste 150 Casper WY 82601		Purchase Order #		See Attached Table 1 (4.14, Guide 8, Radon 222)		See Attached Table 9 (Blanks)	
Email <i>trickerson@treccorp.com</i>		Matrix		See Attached Table 2 (Air Particulate)		See Attached Table 8 WYDES Discharge	
Phone 307-265-2696		# of Containers		See Attached Table 3 (Vegetation)		See Attached Table 5 (Soil)	
Quote #		SAMPLE IDENTIFICATION		See Attached Table 4 (Sediment)		See Attached Table 8 WYDES Discharge	
ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	DATE	TIME	DATE	TIME
1							
2	51201176	10/12	11:30	01M3R-008-120112	WT 13 X		
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
LAB COMMENTS 4 3.1				Relinquished By (Signature/Printed) <i>Traci Nickerson</i>		Received By (Signature/Printed) <i>Alvin McNeil</i> <i>Kathy Boop</i>	
SHIPPING INFO <input type="checkbox"/> UPS <input type="checkbox"/> Fed Express <input type="checkbox"/> US Mail <input type="checkbox"/> Hand Carried <input checked="" type="checkbox"/> Other				MATRIX CODES water <input checked="" type="checkbox"/> WFT Soil SL Solid SD Trip Blank TB Other OT		COMPLIANCE INFORMATION Compliance Monitoring? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Program (SDWA, NPDES,...) PWSID / Permit # Chlorinated? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sample Disposal: Lab <input checked="" type="checkbox"/> Client	
TURNAROUND TIMES <input checked="" type="checkbox"/> Check desired service <input type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH - 5 Working Days <input type="checkbox"/> URGENT - < 2 Working Days Rush & Urgent Surcharges will be applied				ADDITIONAL REMARKS		ADDITIONAL REMARKS	