



Monday, February 20, 2012

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

RE: Reno Creek Project  
Orde

r No.: S1202041

Dear Phil Cavendor:

Inter-Mountain Laboratories received sample UM2-004-120202 on February 2, 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: 2/27/2012

**CLIENT:** AUC LLC  
**Project:** Reno Creek Project  
**Lab Order:** S1202041

**CASE NARRATIVE**  
**Report ID:** S1202041001

Sample UM2-004-120202 was received on February 2, 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

- S1201414-001 - Radiochemistry/Uranium Suspended - RPD outside accepted recovery limits
- LCS-R79681 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- S1202041-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- MB-R79681 - 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: S1202041-001
ClientSample ID: UM2-004-120202
COC: #RC 08186

Date Reported 2/27/2012
Report ID S1202041001
WorkOrder: S1202041
CollectionDate: 2/2/2012 9:00:00 AM
DateReceived: 2/2/2012 4:27:00 PM
FieldSampler: TN
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Field readings for pH, Conductivity, Turbidity, Dissolved Oxygen, Temperature, Oxygen Reduction Potential, Purge Rate, and Water Level.

These results apply only to the samples tested.

RL - Reporting Limit

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

- B Analyte detected in the associated Method Blank, E Value 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  
 1536 Cole Blvd  
 Lakewood, CO 80401

**ProjectName:** Reno Creek Project  
**Lab ID:** S1202041-001  
**ClientSample ID:** UM2-004-120202  
**COC:** #RC 08186

**Date Reported:** 2/27/2012  
**Report ID:** S1202041001

**WorkOrder:** S1202041  
**CollectionDate:** 2/2/2012 9:00:00 AM  
**DateReceived:** 2/2/2012 4:27:00 PM  
**FieldSampler:** TN  
**Matrix:** Water

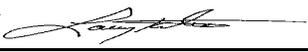
#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	44	mg/L		5	SM 2320B	2/6/2012 7:47:42 PM	MZ
Alkalinity, Bicarbonate as HCO3	14	mg/L		5	SM 2320B	2/6/2012 7:47:42 PM	MZ
Alkalinity, Carbonate as CO3	20	mg/L		5	SM 2320B	2/6/2012 7:47:42 PM	MZ
Chloride	16	mg/L		1	EPA 300.0	2/4/2012 2:10:00 AM	AMB
Fluoride	0.3	mg/L		0.1	SM 4500FC	2/6/2012 7:47:42 PM	MZ
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	2/6/2012 11:44:00 AM	MB
Sulfate	354	mg/L		1	EPA 300.0	2/4/2012 2:10:00 AM	AMB
Calcium	24	mg/L		1	EPA 200.7	2/8/2012 10:10:49 AM	DG
Magnesium	ND	mg/L		1	EPA 200.7	2/8/2012 10:10:49 AM	DG
Potassium	27	mg/L		1	EPA 200.7	2/6/2012 12:44:41 PM	DG
Sodium	171	mg/L		1	EPA 200.7	2/6/2012 12:44:41 PM	DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	2/10/2012 2:30:00 PM	MB
Silica as SiO2	7	mg/L		1	EPA 200.7	2/6/2012 12:44:41 PM	DG
<b>General Parameters</b>							
pH	9.8	s.u.		0.1	SM 4500 H B	2/6/2012 7:47:42 PM	MZ
Electrical Conductivity	1090	µmhos/cm		5	SM 2510B	2/6/2012 7:47:42 PM	MZ
Total Dissolved Solids (180)	710	mg/L		10	SM 2540	2/7/2012 10:04:00 AM	ARF
<b>Data Quality</b>							
Cation Sum	9.33	meq/L		0.01	SM 1030E	2/22/2012 2:37:29 PM	LJK
Anion Sum	8.83	meq/L		0.01	SM 1030E	2/22/2012 2:37:29 PM	LJK
Cation-Anion Balance (± 5%)	2.78	%		0.01	SM 1030E	2/22/2012 2:37:29 PM	LJK
Solids, Total Dissolved (Calc)	630	mg/L		10	SM 1030E	2/22/2012 2:37:29 PM	LJK
Calculated TDS/TDS Ratio (0.80-1.20)	1.13	dec. %		0.01	Calculation	2/22/2012 2:39:19 PM	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



Sample Analysis Report

Company: AUC LLC
1536 Cole Blvd
Lakewood, CO 80401
ProjectName: Reno Creek Project
Lab ID: S1202041-001
ClientSample ID: UM2-004-120202
COC: #RC 08186

Date Reported: 2/27/2012
Report ID: S1202041001
WorkOrder: S1202041
CollectionDate: 2/2/2012 9:00:00 AM
DateReceived: 2/2/2012 4:27:00 PM
FieldSampler: TN
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Metals - Dissolved (Aluminum, Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) and Metals - Suspended (Uranium) and Metals - Total (Iron, Manganese).

These results apply only to the samples tested.

RL - Reporting Limit

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Reviewed by: [Signature]
Lacey Ketron, Water Lab Supervisor



### Sample Analysis Report

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

**ProjectName:** Reno Creek Project  
**Lab ID:** S1202041-001  
**ClientSample ID:** UM2-004-120202  
**COC:** #RC 08186

**Date Reported:** 2/27/2012  
**Report ID:** S1202041001

**WorkOrder:** S1202041  
**CollectionDate:** 2/2/2012 9:00:00 AM  
**DateReceived:** 2/2/2012 4:27:00 PM  
**FieldSampler:** TN  
**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	2/16/2012 7:22:00 PM	SH
Gross Alpha Precision (±)	1.3	pCi/L			SM 7110B	2/16/2012 7:22:00 PM	SH
Gross Beta	19.5	pCi/L		3	SM 7110B	2/16/2012 7:22:00 PM	SH
Gross Beta Precision (±)	1.2	pCi/L			SM 7110B	2/16/2012 7:22:00 PM	SH
Lead 210	ND	pCi/L		1	OTW01	2/16/2012 1:28:00 PM	SH
Lead 210 Precision (±)	NA	pCi/L			OTW01	2/16/2012 1:28:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	2/15/2012 10:06:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	2/15/2012 10:06:00 AM	SH
Radium 226	2.3	pCi/L		0.2	SM 7500-Ra B	2/15/2012 4:06:00 PM	SH
Radium 226 Precision (±)	0.2	pCi/L			SM 7500-Ra B	2/15/2012 4:06:00 PM	SH
Radium 228	ND	pCi/L		1	Ra-05	2/13/2012 5:42:00 PM	SH
Radium 228 Precision (±)	NA	pCi/L			Ra-05	2/13/2012 5:42:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	2/14/2012 12:44:00 PM	WL
Thorium 230 Precision (±)	NA	pCi/L			ACW10	2/14/2012 12:44:00 PM	WL
<b>Radionuclides - Suspended</b>							
Lead 210	2.0	pCi/L		1	OTW01	2/16/2012 3:42:00 PM	SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	2/16/2012 3:42:00 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	2/15/2012 11:25:00 AM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	2/15/2012 11:25:00 AM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	2/13/2012 3:35:00 PM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	2/13/2012 3:35:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	2/15/2012 10:47:00 AM	WL
Thorium 230 Precision (±)	NA	pCi/L			ACW10	2/15/2012 10:47:00 AM	WL
<b>Radionuclides - Total</b>							
Radon 222	302	pCi/L	L	50	SM7500-RN	2/3/2012	LJK
Radon 222 Precision (±)	45	pCi/L	L		SM7500-RN	2/3/2012	LJK

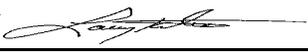
These results apply only to the samples tested.

#### 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:   
 Lacey Ketron, Water Lab Supervisor



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

**Alkalinity**

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	02/06/12 15:52	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	02/06/12 15:42	Alkalinity, Total (As CaCO3)	590	5	601		98.3	90 - 110	

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202043-001AD	02/06/12 20:16	Alkalinity, Bicarbonate as HCO3	81	5	84	3.91		20	
		Alkalinity, Carbonate as CO3	10	5	9	6.26		20	
		Alkalinity, Total (As CaCO3)	83	5	84	2.09		20	

**Conductivity**

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	02/06/12 15:52	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	02/06/12 15:42	Electrical Conductivity	1110	5	1120		98.5	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 79579	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202043-001AD	02/06/12 20:16	Electrical Conductivity	547	5	548	0.182		20	

- Qualifiers:**
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  - E Value above quantitation range
  - J Analyte detected below quantitation limits
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### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

**Dissolved Mercury by EPA 245.1 - Water**

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

Sample ID	RunNo: 79660	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	02/08/12 8:56	Mercury	ND	0.001					

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

Sample ID	RunNo: 79660	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	02/08/12 8:54	Mercury	0.002	0.001	0.002		99.9	85 - 115	

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

Sample ID	RunNo: 79660	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202020-001D	02/08/12 9:20	Mercury	0.002	0.001	0.00244	ND	97.1	70 - 130	

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

Sample ID	RunNo: 79660	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1202020-001D	02/08/12 9:22	Mercury	0.002	0.001	0.002	0.0971		20	

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

Sample ID	RunNo: 79660	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202020-001D	02/08/12 9:19	Mercury	ND	0.001	ND			20	

- Qualifiers:**
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  - H Holding times for preparation or analysis exceeded
  - L Analyzed by a contract laboratory
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  - J Analyte detected below quantitation limits
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### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

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

Sample ID	RunNo: 79576	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	02/06/12 12:12	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: 79576	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	02/06/12 12:14	Aluminum	1.0	0.1	1		99.7	85 - 115	
		Boron	1.0	0.1	1		99.9	85 - 115	
		Chromium	0.99	0.01	1		99.2	85 - 115	
		Iron	1.02	0.05	1		102	85 - 115	
		Manganese	1.05	0.02	1		105	85 - 115	
		Nickel	1.02	0.01	1		102	85 - 115	
		Zinc	1.04	0.01	1		104	85 - 115	

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

Sample ID	RunNo: 79576	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202043-001DS	02/06/12 12:53	Aluminum	0.5	0.1	0.5	ND	106	70 - 130	
		Boron	0.6	0.1	0.5	ND	102	70 - 130	
		Chromium	0.50	0.01	0.5	ND	100	70 - 130	
		Iron	0.50	0.05	0.5	ND	100	70 - 130	
		Manganese	0.51	0.02	0.5	ND	101	70 - 130	
		Nickel	0.49	0.01	0.5	ND	98.2	70 - 130	
		Zinc	0.50	0.01	0.5	ND	100	70 - 130	

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

Sample ID	RunNo: 79576	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1202043-001DSD	02/06/12 12:56	Aluminum	0.5	0.1	0.5	1.51		20	
		Boron	0.5	0.1	0.6	0.889		20	
		Chromium	0.49	0.01	0.50	1.82		20	
		Iron	0.50	0.05	0.50	1.30		20	
		Manganese	0.50	0.02	0.51	1.21		20	
		Nickel	0.48	0.01	0.49	1.41		20	
		Zinc	0.49	0.01	0.50	1.34		20	

- Qualifiers:**
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  - 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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

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

Sample ID	RunNo: 79576	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202042-001DD	02/06/12 12:49	Aluminum	ND	0.1	ND			20	
		Boron	ND	0.1	ND			20	
		Chromium	ND	0.01	ND			20	
		Iron	ND	0.05	ND			20	
		Manganese	ND	0.02	ND			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: 79584	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	02/06/12 13:50	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: 79584	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	02/06/12 13:45	Arsenic	0.102	0.005	0.1		102	85 - 115	
		Barium	ND	0.5	0.1		98.3	85 - 115	
		Cadmium	0.102	0.002	0.1		102	85 - 115	
		Copper	0.10	0.01	0.1		102	85 - 115	
		Lead	0.10	0.02	0.1		102	85 - 115	
		Molybdenum	0.10	0.02	0.1		96.7	85 - 115	
		Uranium	0.100	0.001	0.1		100	85 - 115	
		Vanadium	0.10	0.02	0.1		104	85 - 115	

Sample ID	RunNo: 79584	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	02/06/12 16:38	Selenium	0.102	0.005	0.1		102	85 - 115	

- Qualifiers:**
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  - E Value above quantitation range
  - J Analyte detected below quantitation limits
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  - R RPD outside accepted recovery limits



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

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

Sample ID	RunNo: 79584	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202041-001DS	02/06/12 14:10	Arsenic	1.10	0.005	1.1	0.010	98.7	70 - 130	
		Barium	1.1	0.5	1.1	ND	96.9	70 - 130	
		Cadmium	1.08	0.002	1.1	ND	98.4	70 - 130	
		Copper	1.15	0.01	1.1	ND	104	70 - 130	
		Lead	1.09	0.02	1.1	ND	99.4	70 - 130	
		Molybdenum	1.07	0.02	1.1	ND	96.6	70 - 130	
		Selenium	1.13	0.005	1.1	ND	102	70 - 130	
		Uranium	1.11	0.001	1.1	ND	101	70 - 130	
		Vanadium	1.10	0.02	1.1	ND	100	70 - 130	

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

Sample ID	RunNo: 79584	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1202041-001DMSD	02/06/12 14:14	Arsenic	1.09	0.005	1.10	0.682		20	
		Barium	1.1	0.5	1.1	0.432		20	
		Cadmium	1.08	0.002	1.08	0.225		20	
		Copper	1.16	0.01	1.15	0.546		20	
		Lead	1.09	0.02	1.09	0.00456		20	
		Molybdenum	1.06	0.02	1.07	0.592		20	
		Selenium	1.11	0.005	1.13	1.44		20	
		Uranium	1.10	0.001	1.11	1.53		20	
		Vanadium	1.12	0.02	1.10	1.38		20	

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

Sample ID	RunNo: 79584	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202041-001DD	02/06/12 14:05	Arsenic	0.010	0.005	0.010	0.377		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	ND	0.001	ND			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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

**Fluoride by SM 4500**

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	02/06/12 15:52	Fluoride	ND	0.1					

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	02/06/12 15:42	Fluoride	3.1	0.1	2.96		105	90 - 110	

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202062-003ASPK	02/07/12 0:09	Fluoride	3.1	0.1	2.5	0.4	107	80 - 120	

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202043-001AD	02/06/12 20:16	Fluoride	1.5	0.1	1.4	9.06		20	

**Gross Alpha, Beta by SM 7110B**

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

Sample ID	RunNo: 79890	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-045	02/15/12 21:15	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 79890	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-045	02/15/12 21:15	Gross Alpha (Dissolved)	83	2	73.6		112	83 - 133	
		Gross Beta (Dissolved)	131	3	126		104	88 - 115	

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

Sample ID	RunNo: 79890	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202020-001FMS	02/15/12 21:15	Gross Alpha (Dissolved)	108	2	73.6	ND	147	48 - 153	
		Gross Beta (Dissolved)	152	3	126	15	109	60 - 140	

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

Sample ID	RunNo: 79890	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202042-001FDUP	02/15/12 21:15	Gross Alpha (Dissolved)	ND	2	ND			20	
		Gross Beta (Dissolved)	6	3	6	6.83		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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

**Anions by ION Chromatography**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 79552	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	02/03/12 11:44	Chloride	ND	1					
		Sulfate	ND	1					

Sample ID	RunNo: 79711	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	02/09/12 9:39	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 79552	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	02/03/12 11:21	Chloride	30	1	30		101	90 - 110	
		Sulfate	142	1	150		94.5	90 - 110	

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

Sample ID	RunNo: 79552	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202054-002ASPK	02/03/12 22:22	Chloride	105	1	80	26	98.7	80 - 120	
		Sulfate	605	1	640	ND	94.6	80 - 120	

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

Sample ID	RunNo: 79552	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202054-002A	02/03/12 22:10	Chloride	26	1	26	2.32		20	
		Sulfate	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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

Sample ID	RunNo: 79575	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	02/06/12 12:12	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample ID	RunNo: 79671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	02/08/12 9:57	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 79575	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	02/06/12 12:16	Calcium	41	1	40		102	85 - 115	
		Magnesium	40	1	40		99.3	85 - 115	
		Potassium	40	1	40		98.7	85 - 115	
		Sodium	40	1	40		99.4	85 - 115	

Sample ID	RunNo: 79671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	02/08/12 10:01	Calcium	40	1	40		99.5	85 - 115	
		Magnesium	40	1	40		99.2	85 - 115	
		Potassium	40	1	40		101	85 - 115	
		Sodium	40	1	40		99.5	85 - 115	

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

Sample ID	RunNo: 79575	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202043-001AS	02/06/12 12:53	Calcium	58	1	50	6	104	70 - 130	
		Magnesium	52	1	50	1	102	70 - 130	
		Potassium	60	1	50	10	101	70 - 130	
		Sodium	150	1	50	92	116	70 - 130	

Sample ID	RunNo: 79671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202087-002AS	02/08/12 10:34	Calcium	1110	1	550	549	103	70 - 130	
		Magnesium	853	1	550	308	99.2	70 - 130	
		Potassium	604	1	550	20	106	70 - 130	
		Sodium	758	1	550	180	105	70 - 130	

**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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

Sample ID	RunNo: 79575	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1202043-001ASD	02/06/12 12:56	Calcium	57	1	58	1.19		20	
		Magnesium	52	1	52	0.938		20	
		Potassium	60	1	60	0.801		20	
		Sodium	148	1	150	0.716		20	

Sample ID	RunNo: 79671	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1202087-002ASD	02/08/12 10:36	Calcium	1110	1	1110	0.0377		20	
		Magnesium	854	1	853	0.0511		20	
		Potassium	605	1	604	0.133		20	
		Sodium	763	1	758	0.700		20	

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

Sample ID	RunNo: 79575	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202042-001AD	02/06/12 12:49	Calcium	6	1	6	0.0742		20	
		Magnesium	1	1	1	0.280		20	
		Potassium	10	1	10	0.207		20	
		Sodium	99	1	100	1.37		20	

Sample ID	RunNo: 79671	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202087-001AD	02/08/12 10:29	Calcium	181	1	181	0.238		20	
		Magnesium	209	1	211	0.806		20	
		Potassium	9	1	9	0.567		20	
		Sodium	121	1	122	0.384		20	

**Nitrogen, Ammonia (as N)**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 79780	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	02/10/12 14:24	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 79780	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	02/10/12 14:26	Nitrogen, Ammonia (As N)	9.7	0.1	10		96.7	90 - 110	

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

Sample ID	RunNo: 79780	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202066-004B	02/10/12 14:41	Nitrogen, Ammonia (As N)	12.3	0.1	10	1.5	108	80 - 120	

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

Sample ID	RunNo: 79780	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202066-004B	02/10/12 14:40	Nitrogen, Ammonia (As N)	1.5	0.1	1.5	2.26		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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

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

Sample ID	RunNo: 79560	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	02/06/12 10:09	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 79560	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	02/06/12 10:11	Nitrogen, Nitrate-Nitrite (as N)	2.2	0.1	2.31		95.2	90 - 110	

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

Sample ID	RunNo: 79560	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202062-003B	02/06/12 11:52	Nitrogen, Nitrate-Nitrite (as N)	13.0	0.05	10	3.15	98.6	80 - 120	

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

Sample ID	RunNo: 79560	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202062-003B	02/06/12 11:51	Nitrogen, Nitrate-Nitrite (as N)	2.99	0.05	3.15	5.10		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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

Sample ID	RunNo: 79949	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB12-038	02/16/12 13:28	Lead 210 (Dissolved)	ND	1					
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Sample ID	RunNo: 79949	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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DMB12-038	02/16/12 13:28	Lead 210 (Suspended)	ND	1					
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Sample ID	RunNo: 79950	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB12-038	02/15/12 10:06	Polonium 210 (Dissolved)	ND	1					
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Sample ID	RunNo: 79950	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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DMB12-038	02/15/12 10:06	Polonium 210 (Suspended)	ND	1					
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Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 79949	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS12-038	02/16/12 13:28	Lead 210 (Dissolved)	15	1	12.8		115	67.6 - 131	
		Lead 210 (Suspended)	15	1	12.8		115	60.3 - 141	

Sample ID	RunNo: 79950	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS12-038 PO	02/15/12 10:06	Polonium 210 (Dissolved)	2	1	1.26		148	35.1 - 175	
		Polonium 210 (Suspended)	2	1	1.26		148	48.6 - 156	

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

Sample ID	RunNo: 79949	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1202041-001FMS	02/16/12 15:42	Lead 210 (Suspended)	14	1	12.8	2	92.2	62.4 - 132	
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Sample ID	RunNo: 79950	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1202021-001FMS	02/15/12 11:25	Polonium 210 (Suspended)	11	1	11.1	7	39.0	28 - 173	
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Sample Type **DUP** Units: pCi/L

Sample ID	RunNo: 79949	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1202042-001FDUP	02/16/12 13:28	Lead 210 (Dissolved)	ND	1	ND			20	
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Sample ID	RunNo: 79950	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1202042-001FDUP	02/15/12 10:06	Polonium 210 (Dissolved)	ND	1	ND			20	
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**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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

**Radium 228**

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

Sample ID	RunNo: 79815	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-037	02/13/12 17:42	Radium 228 (Dissolved)	ND	1					

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

Sample ID	RunNo: 79815	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-037	02/13/12 17:42	Radium 228 (Dissolved)	9	1	9.83		92.5	74.9 - 122	

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

Sample ID	RunNo: 79815	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202021-001FMS	02/13/12 17:42	Radium 228 (Dissolved)	12	1	9.83	1	107	48.4 - 167	

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

Sample ID	RunNo: 79815	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202041-001FDUP	02/13/12 17:42	Radium 228 (Dissolved)	ND	1	ND			20	

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 79885	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-039	02/13/12 15:35	Radium 226 (Suspended)	ND	0.2					

Sample ID	RunNo: 79887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-037	02/15/12 14:03	Radium 226 (Dissolved)	ND	0.2					

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

Sample ID	RunNo: 79885	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-039	02/13/12 15:35	Radium 226 (Suspended)	4.9	0.2	5.06		95.9	56.4 - 132	

Sample ID	RunNo: 79887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-037	02/15/12 14:03	Radium 226 (Dissolved)	5.3	0.2	5.06		105	62.5 - 125	

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

Sample ID	RunNo: 79885	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202020-001FMS	02/13/12 15:35	Radium 226 (Suspended)	4.6	0.2	5.03	ND	92.1	51.4 - 135	

Sample ID	RunNo: 79887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202008-002CMS	02/15/12 14:03	Radium 226 (Dissolved)	5.3	0.2	5.06	0.6	91.8	41.6 - 146	

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

Sample ID	RunNo: 79885	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202019-001FDUP	02/13/12 15:35	Radium 226 (Suspended)	ND	0.2	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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

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

Sample ID	RunNo: 79887	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202008-001CDUP	02/15/12 14:03	Radium 226 (Dissolved)	601	0.2	585	2.72		20	

**Thorium 230 in Water**Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79772	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-039	02/10/12 13:25	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 79772	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-039	02/14/12 8:13	Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 79772	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-039	02/10/12 13:25	Thorium 230 (Dissolved)	11	0.2	12		91.5	67.1 - 134	
		Thorium 230 (Suspended)	11	0.2	12		91.5	69.2 - 127	

**Radon 222 by SM7500-RN**Sample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 79681	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R79681	02/03/12 0:00	Radon-222	ND	50					L

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

Sample ID	RunNo: 79681	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R79681	02/03/12 0:00	Radon-222	23500	100	22500		104	75 - 125	L

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

Sample ID	RunNo: 79681	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202041-001A	02/03/12 0:00	Radon-222	290	50	300	0		20	L

**Silica as SiO2**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 79578	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	02/06/12 12:12	Silica as SiO2	ND	1					

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

Sample ID	RunNo: 79578	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	02/06/12 12:14	Silica as SiO2	2	1	2.14		98.9	85 - 115	

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

Sample ID	RunNo: 79578	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202042-001DD	02/06/12 12:49	Silica as SiO2	4	1	4	0.141		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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

**Solids By SM 2540**

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

Sample ID	RunNo: 79739	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	02/07/12 10:02	Total Dissolved Solids (180)	10.0	10					

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

Sample ID	RunNo: 79739	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	02/07/12 10:03	Total Dissolved Solids (180)	230	10	226		104	90 - 110	

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

Sample ID	RunNo: 79739	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202045-001A	02/07/12 10:10	Total Dissolved Solids (180)	1800	10	1800	0.223		20	

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

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

Sample ID	RunNo: 79626	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-5826	02/07/12 16:45	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 79626	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-5826	02/07/12 16:47	Iron	0.50	0.05	0.5		99.7	85 - 115	
		Manganese	0.20	0.02	0.2		97.8	85 - 115	

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

Sample ID	RunNo: 79626	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1202020-001ES	02/07/12 16:57	Iron	0.51	0.05	0.5	ND	98.1	70 - 130	
		Manganese	0.19	0.02	0.2	ND	96.8	70 - 130	

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

Sample ID	RunNo: 79626	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1202020-001EMSD	02/07/12 16:59	Iron	0.48	0.05	0.51	5.77		20	
		Manganese	0.18	0.02	0.19	5.57		20	

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

Sample ID	RunNo: 79626	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202019-001ED	02/07/12 16:52	Iron	ND	0.05	ND			20	
		Manganese	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:** S1202041  
**Project:** Reno Creek Project

**Date:** 2/27/2012  
**Report ID:** S1202041001

**Suspended Natural Uranium**

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

Sample ID	RunNo: 79645	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	02/07/12 12:36	Uranium Suspended	ND	0.0003					

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

Sample ID	RunNo: 79645	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	02/07/12 12:32	Uranium Suspended	0.0979	0.0003	0.1		97.9	85 - 115	

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

Sample ID	RunNo: 79645	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201414-001FS	02/07/12 13:45	Uranium Suspended	1.11	0.0003	1.1	0.0015	101	70 - 130	

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

Sample ID	RunNo: 79645	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1201414-001FMSD	02/07/12 13:49	Uranium Suspended	1.09	0.0003	1.11	2.02		20	

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

Sample ID	RunNo: 79645	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201414-001FD	02/07/12 13:40	Uranium Suspended	0.0008	0.0003	0.0015	47.5		20	R

**pH Water**

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	02/06/12 15:42	pH	8.7	0.1	8.48		103	90 - 110	

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

Sample ID	RunNo: 79579	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1202043-001AD	02/06/12 20:16	pH	9.2	0.1	9.1	0.505		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  
 1673 Terra Ave.  
 Sheridan, WY 82801  
 (307) 672-6945

**- CHAIN OF CUSTODY RECORD -**

This is a LEGAL DOCUMENT. All shaded fields must be completed. See reverse for instructions. #RC 08186

Client Name		Project Identification		Sampler (Signature/Printed)		Telephone #	
AUC LLC		Reno Creek Project		Jaci Nickerson		Jaci Nickerson	
Report Address		Contact Name		Email		Phone	
pcavendor@auc-llc.com; trickerson@treccorp.com; johnriver@treccorp.com		Jaci Nickerson		trickerson@treccorp.com		307-265-0696	
Invoice Address		Purchase Order #		Quote #		Matrix	
AUC LLC 900 Warner Ct. Ste 130 Casper WY 82601							
ITEM	LAB ID (Lab Use Only)	DATE	TIME	SAMPLE IDENTIFICATION	# of Containers	ANALYSES / PARAMETERS	REMARKS
1						See Attached Table 1 (4.14, Guide 8, Radon 222)	
2	SI 202041-001	2/2/12	900	UM2-004-120202 LOT 13		See Attached Table 2 (Air Particulate)	Groundwater
3						See Attached Table 3 (Vegetation)	
4						See Attached Table 4 (Sediment)	
5						See Attached Table 5 (Soil)	
6						See Attached Table 8 WYPDES Discharge	
7						See Attached Table 9 (Blanks)	
8							
9							
10							
11							
12							
13							
14							

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
3.1 ✓	Jaci Nickerson	2/2/12	9:00	Alvin M. Wood	2/2/12	16:27
				Rethyn Boyd	2/3/12	11:17

SHIPPING INFO	MATRIX CODES	TURNAROUND TIMES	COMPLIANCE INFORMATION	ADDITIONAL REMARKS
<input type="checkbox"/> UPS <input type="checkbox"/> Fed Express <input type="checkbox"/> US Mail <input type="checkbox"/> Hand Carried <input checked="" type="checkbox"/> Other	Water <input checked="" type="checkbox"/> WT Soil <input type="checkbox"/> SL Solid <input type="checkbox"/> SD Trip Blank <input type="checkbox"/> TB Other <input type="checkbox"/> OT	<input checked="" type="checkbox"/> Check desired service <input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH - 5 Working Days <input type="checkbox"/> URGENT - < 2 Working Days Rush & Urgent Surcharges will be applied	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"/> Y <input type="checkbox"/> Client	