



Friday, December 23, 2011

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

RE: Reno Creek Project  
Orde

r No.: S1111044

Dear Phil Cavendor:

Inter-Mountain Laboratories received sample PZM16-004-111102 on November 2, 2011.

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: 12/23/2011

**CLIENT:** AUC LLC  
**Project:** Reno Creek Project  
**Lab Order:** S1111044

**CASE NARRATIVE**  
**Report ID:** S1111044001

Sample PZM16-004-111102 was received on November 2, 2011.

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

S1111046-001 - General Parameters/Nitrogen, Ammonia (As N) - RPD outside accepted recovery limits  
S1111038-003 - Radiochemistry/Polonium 210 (Suspended) - RPD outside accepted recovery limits  
S1111038-003 - Radiochemistry/Lead 210 (Suspended) - RPD outside accepted recovery limits  
S1111044-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory  
LCS-R77303 - General Parameters/Radon-222 - Analyzed by a contract laboratory  
MB-R77303 - 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:** S1111044-001  
**ClientSample ID:** PZM16-004-111102  
**COC:** RC 08400

**Date Reported:** 12/23/2011  
**Report ID:** S1111044001

**WorkOrder:** S1111044  
**CollectionDate:** 11/2/2011 1:30:00 PM  
**DateReceived:** 11/2/2011 4:28:00 PM  
**FieldSampler:** TN  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH Reading 1	7.82	s.u.			Field	11/2/2011 1:30:00 PM
pH Reading 2	7.84	s.u.			Field	11/2/2011 1:30:00 PM
pH Reading 3	7.74	s.u.			Field	11/2/2011 1:30:00 PM
Conductivity Reading 1	1383	µmhos/cm			Field	11/2/2011 1:30:00 PM
Conductivity Reading 2	1382	µmhos/cm			Field	11/2/2011 1:30:00 PM
Conductivity Reading 3	1384	µmhos/cm			Field	11/2/2011 1:30:00 PM
Turbidity Reading 1	5.7	NTU			Field	11/2/2011 1:30:00 PM
Turbidity Reading 2	6.3	NTU			Field	11/2/2011 1:30:00 PM
Turbidity Reading 3	6.4	NTU			Field	11/2/2011 1:30:00 PM
Dissolved Oxygen Reading 1	0.16	mg/L			Field	11/2/2011 1:30:00 PM
Dissolved Oxygen Reading 2	0.14	mg/L			Field	11/2/2011 1:30:00 PM
Dissolved Oxygen Reading 3	0.11	mg/L			Field	11/2/2011 1:30:00 PM
Temperature Reading 1	10.01	°C			Field	11/2/2011 1:30:00 PM
Temperature Reading 2	10.06	°C			Field	11/2/2011 1:30:00 PM
Temperature Reading 3	10.06	°C			Field	11/2/2011 1:30:00 PM
Oxygen Reduction Potential Reading	-207.4	mV			Field	11/2/2011 1:30:00 PM
Oxygen Reduction Potential Reading	-209.0	mV			Field	11/2/2011 1:30:00 PM
Oxygen Reduction Potential Reading	-202.4	mV			Field	11/2/2011 1:30:00 PM
Purge Rate Reading 1	700	ml/min			Field	11/2/2011 1:30:00 PM
Purge Rate Reading 2	700	ml/min			Field	11/2/2011 1:30:00 PM
Purge Rate Reading 3	700	ml/min			Field	11/2/2011 1:30:00 PM
Water Level Reading 1	137.90	Ft			Field	11/2/2011 1:30:00 PM
Water Level Reading 2	137.91	Ft			Field	11/2/2011 1:30:00 PM
Water Level Reading 3	137.00	Ft			Field	11/2/2011 1:30:00 PM

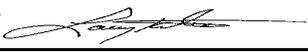
These results apply only to the samples tested.

#### RL - Reporting Limit

**Qualifiers:**

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

- B Analyte detected in the associated Method Blank
- E Value 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:** S1111044-001  
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**WorkOrder:** S1111044  
**CollectionDate:** 11/2/2011 1:30:00 PM  
**DateReceived:** 11/2/2011 4:28:00 PM  
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**Matrix:** Water

#### Comments

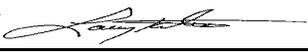
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Anions/Cations</b>						
Alkalinity, Total (As CaCO3)	191	mg/L		5	SM 2320B	11/4/2011 9:26:54 AM AMB
Alkalinity, Bicarbonate as HCO3	232	mg/L		5	SM 2320B	11/4/2011 9:26:54 AM AMB
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	11/4/2011 9:26:54 AM AMB
Chloride	4	mg/L		1	EPA 300.0	11/4/2011 8:33:00 PM ARF
Fluoride	ND	mg/L		0.1	SM 4500FC	11/4/2011 9:26:54 AM AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	11/7/2011 11:37:00 AM MB
Sulfate	514	mg/L		1	EPA 300.0	11/4/2011 8:33:00 PM ARF
Calcium	112	mg/L		1	EPA 200.7	11/3/2011 7:55:27 PM DG
Magnesium	24	mg/L		1	EPA 200.7	11/3/2011 7:55:27 PM DG
Potassium	8	mg/L		1	EPA 200.7	11/3/2011 7:55:27 PM DG
Sodium	185	mg/L		1	EPA 200.7	11/3/2011 7:55:27 PM DG
Nitrogen, Ammonia (As N)	1.2	mg/L		0.1	EPA 350.1	11/4/2011 11:30:00 AM MB
Silica as SiO2	10	mg/L		1	EPA 200.7	11/3/2011 7:55:27 PM DG
<b>General Parameters</b>						
pH	8.0	s.u.		0.1	SM 4500 H B	11/4/2011 9:26:54 AM AMB
Electrical Conductivity	1350	µmhos/cm		5	SM 2510B	11/4/2011 9:26:54 AM AMB
Total Dissolved Solids (180)	1000	mg/L		10	SM 2540	11/3/2011 12:20:00 PM TH
<b>Data Quality</b>						
Cation Sum	15.88	meq/L		0.01	SM 1030E	11/9/2011 4:05:37 PM LJK
Anion Sum	14.61	meq/L		0.01	SM 1030E	11/9/2011 4:05:37 PM LJK
Cation-Anion Balance (± 5%)	4.13	%		0.01	SM 1030E	11/9/2011 4:05:37 PM LJK
Solids, Total Dissolved (Calc)	970	mg/L		10	SM 1030E	11/9/2011 4:05:37 PM LJK
Calculated TDS/TDS Ratio (0.80-1.20)	1.03	dec. %		0.01	Calculation	11/9/2011 4:09:09 PM LJK

These results apply only to the samples tested.

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- E Value above quantitation range
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- 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: S1111044-001
ClientSample ID: PZM16-004-111102
COC: RC 08400

Date Reported 12/23/2011
Report ID S1111044001
WorkOrder: S1111044
CollectionDate: 11/2/2011 1:30:00 PM
DateReceived: 11/2/2011 4:28:00 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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C Calculated Value
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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: S1111044-001
ClientSample ID: PZM16-004-111102
COC: RC 08400

Date Reported 12/23/2011
Report ID S1111044001
WorkOrder: S1111044
CollectionDate: 11/2/2011 1:30:00 PM
DateReceived: 11/2/2011 4:28:00 PM
FieldSampler: TN
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Radionuclides - Dissolved (Gross Alpha, Lead 210, etc.) and Radionuclides - Suspended (Lead 210, Polonium 210, etc.).

These results apply only to the samples tested.

RL - Reporting Limit

- Qualifiers: \* Value exceeds Maximum Contaminant Level
C Calculated Value
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
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O Outside the Range of Dilutions

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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Alkalinity**

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	11/04/11 9:06	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	11/04/11 8:57	Alkalinity, Total (As CaCO3)	594	5	601		98.9	90 - 110	

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111084-002AD	11/04/11 12:00	Alkalinity, Bicarbonate as HCO3	785	5	783	0.282		20	
		Alkalinity, Carbonate as CO3	ND	5	ND			20	
		Alkalinity, Total (As CaCO3)	643	5	641	0.282		20	

**Conductivity**

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	11/04/11 9:06	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	11/04/11 8:57	Electrical Conductivity	1080	5	1120		95.9	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 76586	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111084-002AD	11/04/11 12:00	Electrical Conductivity	8060	5	8110	0.617		20	

- Qualifiers:**
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  - 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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Dissolved Mercury by EPA 245.1 - Water**

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

Sample ID	RunNo: 76671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	11/08/11 8:06	Mercury	ND	0.001					

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

Sample ID	RunNo: 76671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	11/08/11 8:05	Mercury	0.002	0.001	0.002		99.7	85 - 115	

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

Sample ID	RunNo: 76671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111038-003D	11/08/11 9:34	Mercury	0.002	0.001	0.00244	ND	96.5	70 - 130	

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

Sample ID	RunNo: 76671	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1111038-003D	11/08/11 9:36	Mercury	0.002	0.001	0.002	0.123		20	

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

Sample ID	RunNo: 76671	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111038-003D	11/08/11 9:32	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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Dissolved Metals by ICP - EPA 200.7 - Water**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 76543	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	11/03/11 10:25	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: 76543	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	11/03/11 10:27	Aluminum	1.0	0.1	1		98.3	85 - 115	
		Boron	1.0	0.1	1		101	85 - 115	
		Chromium	1.04	0.01	1		104	85 - 115	
		Iron	1.04	0.05	1		104	85 - 115	
		Manganese	1.06	0.02	1		106	85 - 115	
		Nickel	1.06	0.01	1		106	85 - 115	
		Zinc	1.06	0.01	1		106	85 - 115	

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

Sample ID	RunNo: 76543	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111044-001DS	11/03/11 19:57	Aluminum	0.5	0.1	0.5	ND	110	70 - 130	
		Boron	0.6	0.1	0.5	ND	108	70 - 130	
		Chromium	0.53	0.01	0.5	ND	106	70 - 130	
		Iron	0.52	0.05	0.5	ND	104	70 - 130	
		Manganese	0.55	0.02	0.5	0.05	102	70 - 130	
		Nickel	0.51	0.01	0.5	ND	101	70 - 130	
		Zinc	0.48	0.01	0.5	ND	96.8	70 - 130	

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

Sample ID	RunNo: 76543	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1111044-001DSD	11/03/11 20:00	Aluminum	0.5	0.1	0.5	1.49		20	
		Boron	0.6	0.1	0.6	0.0843		20	
		Chromium	0.54	0.01	0.53	2.19		20	
		Iron	0.54	0.05	0.52	2.74		20	
		Manganese	0.56	0.02	0.55	1.37		20	
		Nickel	0.52	0.01	0.51	3.44		20	
		Zinc	0.52	0.01	0.48	6.34		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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Dissolved Metals by ICP - EPA 200.7 - Water**Sample Type **DUP** Units: mg/L

Sample ID	RunNo: 76543	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111043-001DD	11/03/11 19:53	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	0.16	0.02	0.16	0		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: 76532	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	11/03/11 13:54	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: 76532	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	11/03/11 13:50	Arsenic	0.097	0.005	0.1		97.2	85 - 115	
		Barium	ND	0.5	0.1		96.8	85 - 115	
		Cadmium	0.097	0.002	0.1		97.2	85 - 115	
		Copper	0.10	0.01	0.1		97.7	85 - 115	
		Lead	0.10	0.02	0.1		97.7	85 - 115	
		Molybdenum	0.10	0.02	0.1		99.2	85 - 115	
		Selenium	0.099	0.005	0.1		99.1	85 - 115	
		Uranium	0.095	0.001	0.1		95.3	85 - 115	
		Vanadium	0.10	0.02	0.1		98.7	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  
**Work Order:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Dissolved Metals by ICPMS EPA 200.8 - Water**Sample Type **MS** Units: mg/L

Sample ID	RunNo: 76532	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111043-001DS	11/03/11 14:12	Arsenic	1.10	0.005	1.1	0.008	99.0	70 - 130	
		Barium	1.1	0.5	1.1	ND	93.1	70 - 130	
		Cadmium	1.04	0.002	1.1	ND	94.5	70 - 130	
		Copper	1.04	0.01	1.1	ND	94.5	70 - 130	
		Lead	1.06	0.02	1.1	ND	96.0	70 - 130	
		Molybdenum	1.05	0.02	1.1	ND	95.5	70 - 130	
		Selenium	1.07	0.005	1.1	ND	97.1	70 - 130	
		Uranium	1.06	0.001	1.1	ND	96.0	70 - 130	
		Vanadium	1.08	0.02	1.1	ND	98.0	70 - 130	

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

Sample ID	RunNo: 76532	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1111043-001DMSD	11/03/11 14:16	Arsenic	1.15	0.005	1.10	4.92		20	
		Barium	1.2	0.5	1.1	13.4		20	
		Cadmium	1.16	0.002	1.04	11.5		20	
		Copper	1.15	0.01	1.04	10.1		20	
		Lead	1.09	0.02	1.06	3.22		20	
		Molybdenum	1.21	0.02	1.05	15.0		20	
		Selenium	1.15	0.005	1.07	7.44		20	
		Uranium	1.17	0.001	1.06	11.0		20	
		Vanadium	1.22	0.02	1.08	13.5		20	

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

Sample ID	RunNo: 76532	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111043-001DD	11/03/11 14:08	Arsenic	0.008	0.005	0.008	7.45		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	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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	11/04/11 9:06	Fluoride	ND	0.1					

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	11/04/11 8:57	Fluoride	3.0	0.1	2.96		101	90 - 110	

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111084-004ASPK	11/04/11 12:30	Fluoride	2.7	0.1	2.5	0.3	94.2	80 - 120	

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111084-002AD	11/04/11 12:00	Fluoride	0.2	0.1	0.2	2.16		20	

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

Sample ID	RunNo: 77493	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-334	11/30/11 20:03	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 77493	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-334	11/30/11 20:03	Gross Alpha (Dissolved)	82	2	73.6		111	83 - 133	
		Gross Beta (Dissolved)	137	3	126		109	88 - 115	

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

Sample ID	RunNo: 77493	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111043-001FMS	11/30/11 20:03	Gross Alpha (Dissolved)	120	3	147	ND	81.5	48 - 153	
		Gross Beta (Dissolved)	260	4	252	7	100	60 - 140	

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

Sample ID	RunNo: 77493	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111044-001FDUP	12/01/11 17:30	Gross Alpha (Dissolved)	263	2	243	8.23		20	
		Gross Beta (Dissolved)	33	4	30	9.19		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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Anions by ION Chromatography**

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

Sample ID	RunNo: 76607	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	11/04/11 9:48	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 76607	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	11/04/11 10:00	Chloride	30	1	30		99.7	90 - 110	
		Sulfate	143	1	150		95.2	90 - 110	

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

Sample ID	RunNo: 76607	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111040-003ASPK	11/04/11 19:06	Chloride	88	1	80	7	101	80 - 120	
		Sulfate	1480	1	640	735	116	80 - 120	

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

Sample ID	RunNo: 76607	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111040-003AD	11/04/11 18:53	Chloride	7	1	7	4.17		20	
		Sulfate	743	1	735	1.09		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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

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

Sample ID	RunNo: 76540	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	11/03/11 10:25	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 76540	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	11/03/11 10:29	Calcium	40	1	40		99.9	85 - 115	
		Magnesium	40	1	40		99.9	85 - 115	
		Potassium	41	1	40		102	85 - 115	
		Sodium	39	1	40		97.3	85 - 115	

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

Sample ID	RunNo: 76540	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111038-003AS	11/03/11 19:26	Calcium	91	1	50	45	93.8	70 - 130	
		Magnesium	56	1	50	5	103	70 - 130	
		Potassium	62	1	50	2	120	70 - 130	
		Sodium	77	1	50	20	112	70 - 130	

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

Sample ID	RunNo: 76540	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1111038-003ASD	11/03/11 19:29	Calcium	90	1	91	1.16		20	
		Magnesium	56	1	56	0.366		20	
		Potassium	62	1	62	0.649		20	
		Sodium	76	1	77	0.673		20	

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

Sample ID	RunNo: 76540	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111038-002AD	11/03/11 19:21	Calcium	40	1	39	1.69		20	
		Magnesium	4	1	4	1.48		20	
		Potassium	2	1	2	1.83		20	
		Sodium	18	1	18	0.464		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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Nitrogen, Ammonia (as N)**

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

Sample ID	RunNo: 76610	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	11/04/11 10:33	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 76610	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	11/04/11 10:35	Nitrogen, Ammonia (As N)	10.3	0.1	10		103	90 - 110	

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

Sample ID	RunNo: 76610	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111046-001C	11/04/11 11:35	Nitrogen, Ammonia (As N)	10.5	0.05	10	0.30	102	80 - 120	

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

Sample ID	RunNo: 76610	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111046-001C	11/04/11 11:34	Nitrogen, Ammonia (As N)	0.23	0.05	0.30	23.3		20	R

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

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

Sample ID	RunNo: 76651	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	11/07/11 10:22	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 76651	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	11/07/11 10:24	Nitrogen, Nitrate-Nitrite (as N)	2.1	0.1	2.31		92.6	90 - 110	

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

Sample ID	RunNo: 76651	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111093-002B	11/07/11 11:45	Nitrogen, Nitrate-Nitrite (as N)	9.8	0.1	10	ND	97.5	80 - 120	

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

Sample ID	RunNo: 76651	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111093-002B	11/07/11 11:44	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1	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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 77438	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-318 11/29/11 12:34 Lead 210 (Suspended) ND 1

Sample ID	RunNo: 77439	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-318 11/29/11 11:26 Polonium 210 (Suspended) ND 1

Sample ID	RunNo: 77557	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-318 11/21/11 14:51 Polonium 210 (Dissolved) ND 1

Sample ID	RunNo: 77556	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-318 11/22/11 9:19 Lead 210 (Dissolved) ND 1

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

Sample ID	RunNo: 77438	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-318 11/29/11 12:34 Lead 210 (Suspended) 14 1 12.8 106 60.3 - 141

Sample ID	RunNo: 77439	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-318 PO 11/29/11 11:26 Polonium 210 (Suspended) 5 1 3.89 123 48.6 - 156

Sample ID	RunNo: 77556	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-318 11/22/11 9:19 Lead 210 (Dissolved) 12 1 12.9 95.6 67.6 - 131

Sample ID	RunNo: 77557	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-318 PO 11/21/11 14:51 Polonium 210 (Dissolved) 3 1 2.11 129 35.1 - 175

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

Sample ID	RunNo: 77438	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1111038-001FMS 11/29/11 12:34 Lead 210 (Suspended) 14 1 12.8 ND 107 62.4 - 132

Sample ID	RunNo: 77439	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1111038-001FMS 11/29/11 11:26 Polonium 210 (Suspended) 15 1 12.8 ND 114 28 - 173

Sample ID	RunNo: 77556	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1110428-001EMS 11/22/11 9:19 Lead 210 (Dissolved) 17 1 12.9 2 113 66 - 133

Sample ID	RunNo: 77557	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1110428-001EMS 11/21/11 14:51 Polonium 210 (Dissolved) 5 1 12.9 ND 37.4 20.9 - 160

- 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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 77438	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1111038-003FDUP 11/29/11 12:34 Lead 210 (Suspended) 1 1 ND 20

Sample ID	RunNo: 77439	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1111038-003FDUP 11/29/11 11:26 Polonium 210 (Suspended) 1 1 ND 20

Sample ID	RunNo: 77556	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1110428-003EDUP 11/22/11 9:19 Lead 210 (Dissolved) 6 1 5 11.1 20

Sample ID	RunNo: 77557	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1110428-003EDUP 11/21/11 14:51 Polonium 210 (Dissolved) ND 1 ND 20

**Radium 228**

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

Sample ID	RunNo: 78170	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-346 12/21/11 17:46 Radium 228 (Dissolved) ND 1

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

Sample ID	RunNo: 78170	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-346 12/21/11 17:46 Radium 228 (Dissolved) 10 1 10 101 74.9 - 122

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

Sample ID	RunNo: 78170	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1111038-001FMS 12/21/11 17:46 Radium 228 (Dissolved) 12 1 10 1 108 48.4 - 167

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

Sample ID	RunNo: 78170	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1111038-003FDUP 12/21/11 17:46 Radium 228 (Dissolved) ND 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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 76990	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-311	11/11/11 12:22	Radium 226 (Dissolved)	ND	0.2					

Sample ID	RunNo: 77349	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-318	11/17/11 14:09	Radium 226 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 76990	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-311	11/11/11 12:22	Radium 226 (Dissolved)	4.4	0.2	5.06		86.5	62.5 - 125	

Sample ID	RunNo: 77349	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-318	11/17/11 16:38	Radium 226 (Suspended)	5.6	0.2	5.06		111	56.4 - 132	

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

Sample ID	RunNo: 76990	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1110429-001EMS	11/11/11 14:58	Radium 226 (Dissolved)	17.9	0.2	5.06	13.9	80.4	41.6 - 146	

Sample ID	RunNo: 77349	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111057-001AMS	11/17/11 14:09	Radium 226 (Suspended)	5.7	0.2	5	ND	115	51.4 - 135	

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

Sample ID	RunNo: 76990	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1110428-007EDUP	11/11/11 14:58	Radium 226 (Dissolved)	79.8	0.2	78.0	2.30		20	

Sample ID	RunNo: 77349	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111137-001EDUP	11/17/11 14:09	Radium 226 (Dissolved)	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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

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

Sample ID	RunNo: 77305	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-312	11/21/11 8:23	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 77377	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-313	11/23/11 8:33	Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 77305	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-312	11/21/11 8:23	Thorium 230 (Dissolved)	12	0.2	12		96.4	67.1 - 134	

Sample ID	RunNo: 77377	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-313	11/28/11 9:19	Thorium 230 (Suspended)	11	0.2	12		86.9	69.2 - 127	

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

Sample ID	RunNo: 77305	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111040-001EDUP	11/21/11 8:24	Thorium 230 (Dissolved)	ND	0.2	0.6			20	

Sample ID	RunNo: 77377	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111044-001F DUP	11/28/11 13:31	Thorium 230 (Suspended)	0.3 ± 0.2	0.2	0.3	18.3		20	

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

Sample ID	RunNo: 77303	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R77303	11/03/11 0:00	Radon-222	ND	50					L

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

Sample ID	RunNo: 77303	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R77303	11/03/11 0:00	Radon-222	22500	100	22500		100	75 - 125	L

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

Sample ID	RunNo: 77303	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111044-001A	11/03/11 0:00	Radon-222	2440	50	2510	2.79		20	L

**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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Silica as SiO2**

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

Sample ID	RunNo: 76544	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	11/03/11 10:25	Silica as SiO2	ND	0.1					

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

Sample ID	RunNo: 76544	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	11/03/11 10:27	Silica as SiO2	2.1	0.1	2.14		98.4	85 - 115	

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

Sample ID	RunNo: 76544	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111043-001DD	11/03/11 19:53	Silica as SiO2	17.3	0.1	17.5	1.24		20	

**Solids By SM 2540**

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

Sample ID	RunNo: 76712	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	11/03/11 11:40	Total Dissolved Solids (180)	ND	10					

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

Sample ID	RunNo: 76712	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	11/03/11 11:45	Total Dissolved Solids (180)	210	10	226		94.7	90 - 110	

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

Sample ID	RunNo: 76712	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111040-002A	11/03/11 12:00	Total Dissolved Solids (180)	870	10	880	1.36		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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

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

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

Sample ID	RunNo: 76641	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-5605	11/07/11 18:26	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 76641	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-5605	11/07/11 18:29	Iron	0.48	0.05	0.5		96.6	85 - 115	
		Manganese	0.20	0.02	0.2		97.6	85 - 115	

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

Sample ID	RunNo: 76641	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111044-001ES	11/07/11 18:48	Iron	1.05	0.05	0.5	0.63	85.3	70 - 130	
		Manganese	0.25	0.02	0.2	0.06	94.6	70 - 130	

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

Sample ID	RunNo: 76641	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1111044-001EMSD	11/07/11 18:50	Iron	1.05	0.05	1.05	0.495		20	
		Manganese	0.25	0.02	0.25	0.396		20	

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

Sample ID	RunNo: 76641	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111043-001ED	11/07/11 18:43	Iron	0.42	0.05	0.43	2.05		20	
		Manganese	0.16	0.02	0.16	0.126		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:** S1111044  
**Project:** Reno Creek Project

**Date:** 12/23/2011  
**Report ID:** S1111044001

**Suspended Natural Uranium**

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

Sample ID	RunNo: 76729	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	11/08/11 13:29	Uranium Suspended	ND	0.0003					

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

Sample ID	RunNo: 76729	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	11/08/11 13:25	Uranium Suspended	0.0938	0.0003	0.1		93.8	85 - 115	

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

Sample ID	RunNo: 76729	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1111038-001FS	11/08/11 14:49	Uranium Suspended	1.08	0.0003	1.1	ND	97.8	70 - 130	

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

Sample ID	RunNo: 76729	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1111038-001FMSD	11/08/11 14:53	Uranium Suspended	1.04	0.0003	1.08	3.39		20	

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

Sample ID	RunNo: 76729	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111038-001FD	11/08/11 14:45	Uranium Suspended	ND	0.0003	ND			20	

**pH Water**

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	11/04/11 8:57	pH	8.6	0.1	8.48		101	90 - 110	

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

Sample ID	RunNo: 76586	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111084-002AD	11/04/11 12:00	pH	7.6	0.1	7.6	0.112		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) 672-8945

**- CHAIN OF CUSTODY RECORD -**

This is a LEGAL DOCUMENT. All shaded fields must be completed. See reverse for instructions. #RC 08400

Client Name		Project Identification		Sampler (Signature/Printed)		Telephone #	
AUC LLC		Reno Creek Project		T. Raei Nickerson			
Report Address		Contact Name		Email		Phone	
pcavendor@auc-llc.com; trickerson@treccorp.com; john@treccorp.com		T. Raei Nickerson		T. Raei Nickerson@treccorp.com		307-265-0696	
Invoice Address		Purchase Order #		Quote #			
AUC LLC 909 Wilcox Ct. Ste 150 Casper WY 82401							
ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SAMPLE IDENTIFICATION	Matrix	# of Containers	REMARKS
1							
2	5111044-001	11/21/11	1:30	P2M16-004-11102	WT	13	Groundwater
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
3.00	T. Raei Nickerson	11/21/11	1:30	John McNeil	11/21/11	1:028
				Kathy Bay	11/31/11	9:49

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 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 type="checkbox"/> Y <input checked="" type="checkbox"/> N Program (SDWA, NPDES,...) PWSID / Permit # Chlorinated? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Sample Disposal: Lab <input checked="" type="checkbox"/> Client	