



Friday, October 14, 2011

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

RE: Reno Creek Project  
Orde

r No.: S1108582

Dear Phil Cavendor:

Inter-Mountain Laboratories received samples UM4-003-110830 on August 30, 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: 10/14/2011

**CLIENT:** AUC LLC  
**Project:** Reno Creek Project  
**Lab Order:** S1108582

**CASE NARRATIVE**  
**Report ID:** S1108582001

Sample UM4-003-110830 was received on August 30, 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.

The following sample, in spite of re-analysis of the Cations and Anions, does not balance possibly due to a constituent not accounted for: UM4-003-110830.

Qualifiers by sample

- S1109051-002 - Radiochemistry/Gross Alpha (Dissolved) - RPD outside accepted recovery limits
- S1109051-002 - Radiochemistry/Gross Beta (Dissolved) - RPD outside accepted recovery limits
- MB-R74724 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- LCS-R74724 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- S1108582-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- S1109009-002 - Anions/Fluoride - Spike Recovery outside accepted recovery limits (2)
- S1108582-001 - General Parameters/Total Dissolved Solids (180) - Holding times for preparation or analysis exceeded (1)

(1) The sample were received and initially analyzed for Total Dissolved Solids within holding. The QC associated with the initial batch failed. Samples were re-analyzed out of holding.

(2) Spike failed due to possible matrix interference from the sample.

Reviewed by:

Lacey Ketron, Water Lab Supervisor



### Sample Analysis Report

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

**Date Reported** 10/13/2011  
**Report ID** S1108582001

**ProjectName:** Reno Creek Project  
**Lab ID:** S1108582-001  
**ClientSample ID:** UM4-003-110830  
**COC:** RC 08366

**WorkOrder:** S1108582  
**CollectionDate:** 8/30/2011 11:00:00 AM  
**DateReceived:** 8/30/2011 4:30:00 PM  
**FieldSampler:** TN  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH Reading 1	10.06	s.u.			Field	8/30/2011 11:00:00 AM
pH Reading 2	10.07	s.u.			Field	8/30/2011 11:00:00 AM
pH Reading 3	10.08	s.u.			Field	8/30/2011 11:00:00 AM
Conductivity Reading 1	1983	µmhos/cm			Field	8/30/2011 11:00:00 AM
Conductivity Reading 2	1986	µmhos/cm			Field	8/30/2011 11:00:00 AM
Conductivity Reading 3	1990	µmhos/cm			Field	8/30/2011 11:00:00 AM
Turbidity Reading 1	0.9	NTU			Field	8/30/2011 11:00:00 AM
Turbidity Reading 2	0.9	NTU			Field	8/30/2011 11:00:00 AM
Turbidity Reading 3	1.0	NTU			Field	8/30/2011 11:00:00 AM
Dissolved Oxygen Reading 1	1.05	mg/L			Field	8/30/2011 11:00:00 AM
Dissolved Oxygen Reading 2	1.02	mg/L			Field	8/30/2011 11:00:00 AM
Dissolved Oxygen Reading 3	0.95	mg/L			Field	8/30/2011 11:00:00 AM
Temperature Reading 1	14.60	°C			Field	8/30/2011 11:00:00 AM
Temperature Reading 2	14.64	°C			Field	8/30/2011 11:00:00 AM
Temperature Reading 3	14.77	°C			Field	8/30/2011 11:00:00 AM
Oxygen Reduction Potential Reading	-269.4	mV			Field	8/30/2011 11:00:00 AM
Oxygen Reduction Potential Reading	-269.0	mV			Field	8/30/2011 11:00:00 AM
Oxygen Reduction Potential Reading	-269.7	mV			Field	8/30/2011 11:00:00 AM
Purge Rate Reading 1	150	ml/min			Field	8/30/2011 11:00:00 AM
Purge Rate Reading 2	150	ml/min			Field	8/30/2011 11:00:00 AM
Purge Rate Reading 3	150	ml/min			Field	8/30/2011 11:00:00 AM
Water Level Reading 1	157.86	Ft			Field	8/30/2011 11:00:00 AM
Water Level Reading 2	157.94	Ft			Field	8/30/2011 11:00:00 AM
Water Level Reading 3	158.10	Ft			Field	8/30/2011 11:00:00 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

**Date Reported** 10/13/2011  
**Report ID** S1108582001

**ProjectName:** Reno Creek Project  
**Lab ID:** S1108582-001  
**ClientSample ID:** UM4-003-110830  
**COC:** RC 08366

**WorkOrder:** S1108582  
**CollectionDate:** 8/30/2011 11:00:00 AM  
**DateReceived:** 8/30/2011 4:30:00 PM  
**FieldSampler:** TN  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	248	mg/L		5	SM 2320B	9/1/2011 5:49:50 PM	AMB
Alkalinity, Bicarbonate as HCO3	299	mg/L		5	SM 2320B	9/1/2011 5:49:50 PM	AMB
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	9/1/2011 5:49:50 PM	AMB
Chloride	32	mg/L		1	EPA 300.0	9/12/2011 10:02:00 PM	ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	9/1/2011 5:49:50 PM	AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	9/16/2011 12:30:00 PM	MEL
Sulfate	661	mg/L		1	EPA 300.0	9/12/2011 10:02:00 PM	ARF
Calcium	114	mg/L		1	EPA 200.7	9/14/2011 11:43:06 AM	DG
Magnesium	20	mg/L		1	EPA 200.7	9/1/2011 4:01:43 PM	DG
Potassium	10	mg/L		1	EPA 200.7	9/14/2011 11:43:06 AM	DG
Sodium	352	mg/L		1	EPA 200.7	9/14/2011 11:43:06 AM	DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	9/16/2011 3:07:00 PM	MEL
Silica as SiO2	18	mg/L		1	EPA 200.7	9/1/2011 4:01:43 PM	DG
<b>General Parameters</b>							
pH	8.4	s.u.		0.1	SM 4500 H B	9/1/2011 5:49:50 PM	AMB
Electrical Conductivity	2010	µmhos/cm		5	SM 2510B	9/1/2011 5:49:50 PM	AMB
Total Dissolved Solids (180)	1620	mg/L	H	10	SM 2540	9/8/2011 10:20:00 AM	TH
<b>Data Quality</b>							
Cation Sum	22.86	meq/L		0.01	SM 1030E	9/20/2011 10:26:33 AM	LJK
Anion Sum	19.94	meq/L		0.01	SM 1030E	9/20/2011 10:26:33 AM	LJK
Cation-Anion Balance (± 5%)	6.81	%		0.01	SM 1030E	9/20/2011 10:26:33 AM	LJK
Solids, Total Dissolved (Calc)	1350	mg/L		10	SM 1030E	9/20/2011 10:26:33 AM	LJK
Calculated TDS/TDS Ratio (0.80-1.20)	1.20	dec. %		0.01	Calculation	9/20/2011 11:03:09 AM	LJK

These results apply only to the samples tested.

**RL - Reporting Limit**

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
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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: S1108582-001
ClientSample ID: UM4-003-110830
COC: RC 08366

Date Reported: 10/13/2011
Report ID: S1108582001
WorkOrder: S1108582
CollectionDate: 8/30/2011 11:00:00 AM
DateReceived: 8/30/2011 4:30:00 PM
FieldSampler: TN
Matrix: Water

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), 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: S1108582-001
ClientSample ID: UM4-003-110830
COC: RC 08366

Date Reported: 10/13/2011
Report ID: S1108582001
WorkOrder: S1108582
CollectionDate: 8/30/2011 11:00:00 AM
DateReceived: 8/30/2011 4:30:00 PM
FieldSampler: TN
Matrix: Water

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Radionuclides - Dissolved (Gross Alpha, Gross Beta, Lead 210, Polonium 210, Radium 226, Radium 228, Thorium 230) and Radionuclides - Suspended (Lead 210, Polonium 210, Radium 226, Thorium 230). Total Radon 222 is also listed.

These results apply only to the samples tested.

RL - Reporting Limit

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

- B Analyte detected in the associated Method Blank
E Value 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**Alkalinity**

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/01/11 16:25	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/01/11 16:16	Alkalinity, Total (As CaCO3)	593	5	601		98.7	90 - 110	

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001AD	09/01/11 17:59	Alkalinity, Bicarbonate as HCO3	295	5	299	1.16		20	
		Alkalinity, Carbonate as CO3	ND	5	ND			20	
		Alkalinity, Total (As CaCO3)	248	5	248	0.0408		20	

**Conductivity**

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/01/11 16:25	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/01/11 16:16	Electrical Conductivity	1130	5	1120		100	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 74055	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001AD	09/01/11 17:59	Electrical Conductivity	2010	5	2010	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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**Dissolved Mercury by EPA 245.1 - Water**

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

Sample ID	RunNo: 74230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	09/07/11 8:09	Mercury	ND	0.001					

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

Sample ID	RunNo: 74230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	09/07/11 8:07	Mercury	0.002	0.001	0.002		99.9	85 - 115	

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

Sample ID	RunNo: 74230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108566-001C	09/07/11 8:36	Mercury	0.002	0.001	0.00244	ND	87.2	70 - 130	

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

Sample ID	RunNo: 74230	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1108566-001C	09/07/11 8:38	Mercury	0.002	0.001	0.002	2.86	89.7	20	

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

Sample ID	RunNo: 74230	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108566-001C	09/07/11 8:35	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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

Sample ID	RunNo: 74056	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	09/01/11 13:01	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: 74056	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	09/01/11 13:04	Aluminum	1.0	0.1	1		104	85 - 115	
		Boron	1.0	0.1	1		98.2	85 - 115	
		Chromium	1.02	0.01	1		102	85 - 115	
		Iron	1.03	0.05	1		103	85 - 115	
		Manganese	1.03	0.02	1		103	85 - 115	
		Nickel	1.05	0.01	1		105	85 - 115	
		Zinc	1.03	0.01	1		103	85 - 115	

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

Sample ID	RunNo: 74056	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108583-001DS	09/01/11 16:08	Aluminum	0.6	0.1	0.5	ND	127	70 - 130	
		Boron	0.6	0.1	0.5	ND	118	70 - 130	
		Chromium	0.61	0.01	0.5	ND	121	70 - 130	
		Iron	0.59	0.05	0.5	ND	118	70 - 130	
		Manganese	0.64	0.02	0.5	0.05	118	70 - 130	
		Nickel	0.60	0.01	0.5	ND	120	70 - 130	
		Zinc	0.61	0.01	0.5	ND	121	70 - 130	

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

Sample ID	RunNo: 74056	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1108583-001DSD	09/01/11 16:11	Aluminum	0.6	0.1	0.6	9.83	115	20	
		Boron	0.6	0.1	0.6	8.97	107	20	
		Chromium	0.54	0.01	0.61	10.9	108	20	
		Iron	0.54	0.05	0.59	9.33	107	20	
		Manganese	0.58	0.02	0.64	8.97	106	20	
		Nickel	0.54	0.01	0.60	9.64	108	20	
		Zinc	0.54	0.01	0.61	10.9	108	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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

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

Sample ID	RunNo: 74056	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001DD	09/01/11 16:04	Aluminum	ND	0.1	ND			20	
		Boron	ND	0.1	ND			20	
		Chromium	ND	0.01	ND			20	
		Iron	0.27	0.05	0.27	0.256		20	
		Manganese	0.59	0.02	0.59	0.948		20	
		Nickel	0.02	0.01	0.03	3.13		20	
		Zinc	0.04	0.01	0.04	1.06		20	

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

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

Sample ID	RunNo: 74002	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	08/31/11 13:21	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: 74002	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	08/31/11 13:17	Arsenic	0.102	0.005	0.1		102	85 - 115	
		Barium	ND	0.5	0.1		96.7	85 - 115	
		Cadmium	0.099	0.002	0.1		99.2	85 - 115	
		Copper	0.09	0.01	0.1		94.6	85 - 115	
		Lead	0.10	0.02	0.1		102	85 - 115	
		Molybdenum	0.10	0.02	0.1		100	85 - 115	
		Selenium	0.099	0.005	0.1		98.6	85 - 115	
		Uranium	0.095	0.001	0.1		95.4	85 - 115	
		Vanadium	0.09	0.02	0.1		90.7	85 - 115	

- 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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

Sample ID	RunNo: 74002	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108581-001DS	08/31/11 16:51	Arsenic	1.15	0.005	1.1	ND	104	70 - 130	
		Barium	1.1	0.5	1.1	ND	95.8	70 - 130	
		Cadmium	1.08	0.002	1.1	ND	98.5	70 - 130	
		Copper	1.06	0.01	1.1	ND	96.0	70 - 130	
		Lead	1.08	0.02	1.1	ND	98.2	70 - 130	
		Molybdenum	1.13	0.02	1.1	ND	102	70 - 130	
		Selenium	1.12	0.005	1.1	ND	102	70 - 130	
		Uranium	1.07	0.001	1.1	0.001	96.9	70 - 130	
		Vanadium	1.00	0.02	1.1	ND	90.8	70 - 130	

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

Sample ID	RunNo: 74002	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1108581-001DMSD	08/31/11 16:55	Arsenic	1.14	0.005	1.15	0.443	104	20	
		Barium	1.1	0.5	1.1	0.569	95.2	20	
		Cadmium	1.07	0.002	1.08	0.882	97.6	20	
		Copper	1.06	0.01	1.06	0.150	96.1	20	
		Lead	1.09	0.02	1.08	0.771	99.0	20	
		Molybdenum	1.13	0.02	1.13	0.514	103	20	
		Selenium	1.11	0.005	1.12	0.850	101	20	
		Uranium	1.06	0.001	1.07	0.249	96.7	20	
		Vanadium	1.00	0.02	1.00	0.0130	90.8	20	

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

Sample ID	RunNo: 74002	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108581-001DD	08/31/11 16:47	Arsenic	ND	0.005	ND			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	0.001	0.001	0.001	8.32		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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/01/11 16:25	Fluoride	ND	0.1					

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/01/11 16:16	Fluoride	3.0	0.1	2.96		103	90 - 110	

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109009-002ASPK	09/01/11 21:37	Fluoride	2.1	0.1	2.5	0.9	44.6	80 - 120	S

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001AD	09/01/11 17:59	Fluoride	0.3	0.1	0.3	0.559		20	

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

Sample ID	RunNo: 75488	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-270	10/05/11 20:18	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 75488	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-270	10/05/11 20:18	Gross Alpha (Dissolved)	87	2	73.6		119	83 - 133	
		Gross Beta (Dissolved)	129	3	126		103	88 - 115	

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

Sample ID	RunNo: 75488	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109051-001FMS	10/05/11 19:29	Gross Alpha (Dissolved)	68	2	73.6	3	87.9	48 - 153	
		Gross Beta (Dissolved)	141	3	126	3	109	60 - 140	

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

Sample ID	RunNo: 75488	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109051-002FDUP	10/05/11 19:29	Gross Alpha (Dissolved)	4	2	5	22.1		20	R
		Gross Beta (Dissolved)	3	3	4	22.3		20	R

<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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**Anions by ION Chromatography**

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

Sample ID	RunNo: 74469	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/12/11 10:36	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 74469	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	09/12/11 10:49	Chloride	31	1	30		102	90 - 110	
		Sulfate	146	1	150		97.7	90 - 110	

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

Sample ID	RunNo: 74469	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108615-001ASPK	09/13/11 2:51	Chloride	6	1	5	ND	118	80 - 120	
		Sulfate	61	1	40	24	92.6	80 - 120	

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

Sample ID	RunNo: 74469	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108615-001AD	09/13/11 2:38	Chloride	ND	1	ND			20	
		Sulfate	24	1	24	0.381		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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

Sample ID	RunNo: 74054	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	09/01/11 13:01	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample ID	RunNo: 74567	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	09/14/11 10:10	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 74054	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	09/01/11 13:06	Calcium	40	1	40		100	85 - 115	
		Magnesium	40	1	40		99.5	85 - 115	
		Potassium	42	1	40		104	85 - 115	
		Sodium	40	1	40		101	85 - 115	

Sample ID	RunNo: 74567	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	09/14/11 10:15	Calcium	39	1	40		97.0	85 - 115	
		Magnesium	41	1	40		102	85 - 115	
		Potassium	39	1	40		96.5	85 - 115	
		Sodium	37	1	40		93.4	85 - 115	

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

Sample ID	RunNo: 74054	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108615-001AS	09/01/11 17:09	Calcium	56	1	50	2	108	70 - 130	
		Magnesium	53	1	50	ND	105	70 - 130	
		Potassium	56	1	50	1	110	70 - 130	
		Sodium	57	1	50	1	111	70 - 130	

Sample ID	RunNo: 74567	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109229-006AS	09/14/11 14:14	Calcium	55	1	50	3	104	70 - 130	
		Magnesium	57	1	50	ND	112	70 - 130	
		Potassium	53	1	50	2	102	70 - 130	
		Sodium	53	1	50	1	103	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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

Sample ID	RunNo: 74054	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1108615-001ASD	09/01/11 17:12	Calcium	61	1	56	8.58	117	20	
		Magnesium	59	1	53	10.6	116	20	
		Potassium	61	1	56	8.29	119	20	
		Sodium	62	1	57	9.67	122	20	

Sample ID	RunNo: 74567	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1109229-006ASD	09/14/11 14:16	Calcium	55	1	55	1.42	105	20	
		Magnesium	57	1	57	1.23	113	20	
		Potassium	53	1	53	1.16	103	20	
		Sodium	53	1	53	1.22	104	20	

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

Sample ID	RunNo: 74054	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001AD	09/01/11 16:04	Calcium	118	1	118	0.358		20	
		Magnesium	20	1	20	0.139		20	
		Potassium	10	1	10	0.353		20	
		Sodium	384	1	355	8.13		20	

Sample ID	RunNo: 74567	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109229-005AD	09/14/11 14:09	Calcium	1	1	1	0.520		20	
		Magnesium	ND	1	ND			20	
		Potassium	1	1	1	0.650		20	
		Sodium	ND	1	ND			20	

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

Sample ID	RunNo: 74708	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/16/11 13:41	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 74708	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	09/16/11 13:43	Nitrogen, Ammonia (As N)	10.1	0.1	10		101	90 - 110	

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

Sample ID	RunNo: 74708	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109241-001B	09/16/11 15:13	Nitrogen, Ammonia (As N)	12.4	0.1	10	1.9	106	80 - 120	

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

Sample ID	RunNo: 74708	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109241-001B	09/16/11 15:12	Nitrogen, Ammonia (As N)	1.9	0.1	1.9	0.938		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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

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

Sample ID	RunNo: 74698	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	09/16/11 10:16	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 74698	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	09/16/11 10:18	Nitrogen, Nitrate-Nitrite (as N)	2.4	0.1	2.31		105	90 - 110	

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

Sample ID	RunNo: 74698	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109229-004B	09/16/11 12:39	Nitrogen, Nitrate-Nitrite (as N)	9.9	0.1	10	ND	98.9	80 - 120	

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

Sample ID	RunNo: 74698	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109229-004B	09/16/11 12:38	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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

Sample ID	RunNo: 75405	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-269	10/04/11 15:52	Lead 210 (Suspended)	ND	1					

Sample ID	RunNo: 75406	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-269	10/04/11 12:15	Polonium 210 (Suspended)	ND	1					

Sample ID	RunNo: 75583	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-272	10/10/11 15:29	Lead 210 (Dissolved)	ND	1					

Sample ID	RunNo: 75584	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-272	10/10/11 12:50	Polonium 210 (Dissolved)	ND	1					

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

Sample ID	RunNo: 75405	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-269	10/04/11 15:52	Lead 210 (Suspended)	14	1	12.9		108	60.3 - 141	

Sample ID	RunNo: 75406	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-269 PO	10/04/11 12:15	Polonium 210 (Suspended)	3	1	2.49		138	48.6 - 156	

Sample ID	RunNo: 75583	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-272	10/10/11 15:29	Lead 210 (Dissolved)	15	1	12.9		113	67.6 - 131	

Sample ID	RunNo: 75584	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-272 PO	10/10/11 12:50	Polonium 210 (Dissolved)	3	1	2.42		119	35.1 - 175	

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

Sample ID	RunNo: 75405	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108364-004EMS	10/04/11 15:52	Lead 210 (Suspended)	14	1	12.9	1	94.0	62.4 - 132	

Sample ID	RunNo: 75406	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108364-004EMS	10/04/11 12:15	Polonium 210 (Suspended)	11	1	12.9	ND	81.3	28 - 173	

Sample ID	RunNo: 75583	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108611-001FMS	10/10/11 15:29	Lead 210 (Dissolved)	20	1	12.9	6	103	66 - 133	

Sample ID	RunNo: 75584	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108611-001FMS	10/10/11 12:50	Polonium 210 (Dissolved)	9	1	12.9	ND	71.4	20.9 - 160	

**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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 75405	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1108581-001FDUP 10/04/11 17:55 Lead 210 (Suspended) 1 1 1 20.5 20

Sample ID	RunNo: 75406	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1108581-001FDUP 10/04/11 13:24 Polonium 210 (Suspended) ND 1 ND 20

Sample ID	RunNo: 75583	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1108582-001FDUP 10/10/11 15:29 Lead 210 (Dissolved) ND 1 ND 20

Sample ID	RunNo: 75584	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1108582-001FDUP 10/10/11 12:50 Polonium 210 (Dissolved) ND 1 ND 20

**Radium 228**

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

Sample ID	RunNo: 75417	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-272 10/05/11 16:46 Radium 228 (Dissolved) ND 1

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

Sample ID	RunNo: 75417	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-272 10/05/11 16:46 Radium 228 (Dissolved) 10 1 9.94 104 74.9 - 122

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

Sample ID	RunNo: 75417	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1108581-001FMS 10/05/11 16:46 Radium 228 (Dissolved) 10 1 9.94 ND 103 48.4 - 167

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

Sample ID	RunNo: 75417	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1108583-001FDUP 10/05/11 16:46 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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 74900	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-255	09/15/11 9:32	Radium 226 (Dissolved)	ND	0.2					

Sample ID	RunNo: 75190	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-262	09/27/11 17:12	Radium 226 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 74900	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-255	09/15/11 9:32	Radium 226 (Dissolved)	4.9	0.2	5.06		96.7	62.5 - 125	

Sample ID	RunNo: 75190	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-262	09/27/11 17:12	Radium 226 (Suspended)	4.8	0.2	5.06		94.5	56.4 - 132	

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

Sample ID	RunNo: 74900	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108554-001FMS	09/15/11 9:32	Radium 226 (Dissolved)	4.7	0.2	5.06	ND	93.1	41.6 - 146	

Sample ID	RunNo: 75190	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108612-001FMS	09/27/11 17:12	Radium 226 (Suspended)	5.1	0.2	5.06	0.2	95.8	51.4 - 135	

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

Sample ID	RunNo: 74900	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108554-002FDUP	09/15/11 9:32	Radium 226 (Dissolved)	ND	0.2	ND			20	

Sample ID	RunNo: 75190	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109004-004GDUP	09/27/11 17:12	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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

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

Sample ID	RunNo: 75556	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-263	10/03/11 9:12	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 75561	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-270	10/06/11 9:05	Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 75556	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-263	10/03/11 9:12	Thorium 230 (Dissolved)	12	0.2	12		95.6	67.1 - 134	

Sample ID	RunNo: 75561	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-270	10/06/11 9:05	Thorium 230 (Suspended)	14	0.2	12		111	69.2 - 127	

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

Sample ID	RunNo: 75556	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109004-001GDUP	10/03/11 9:12	Thorium 230 (Dissolved)	0.2	0.2	0.2	9.87		20	

Sample ID	RunNo: 75561	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109172-001EDUP	10/07/11 8:37	Thorium 230 (Suspended)	ND	0.2	ND			20	

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

Sample ID	RunNo: 74724	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R74724	08/31/11 0:00	Radon-222	ND	50					L

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

Sample ID	RunNo: 74724	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R74724	08/31/11 0:00	Radon-222	22900	100	22500		102	75 - 125	L

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

Sample ID	RunNo: 74724	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001A	08/31/11 0:00	Radon-222	ND	50	ND			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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**Silica as SiO2**

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

Sample ID	RunNo: 74058	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	09/01/11 13:01	Silica as SiO2	ND	0.1					

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

Sample ID	RunNo: 74058	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	09/01/11 13:04	Silica as SiO2	2.1	0.1	2.14		97.9	85 - 115	

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

Sample ID	RunNo: 74058	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001DD	09/01/11 16:04	Silica as SiO2	17.6	0.1	17.6	0.168		20	

**Solids By SM 2540**

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

Sample ID	RunNo: 74368	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	09/08/11 10:10	Total Dissolved Solids (180)	ND	10					

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

Sample ID	RunNo: 74368	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	09/08/11 10:15	Total Dissolved Solids (180)	220	10	226		99.1	90 - 110	

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

Sample ID	RunNo: 74368	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001A	09/08/11 10:25	Total Dissolved Solids (180)	1640	10	1620	0.985		20	H

- 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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**Total (200.2) Metals by EPA 200.7 ICP - Water**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 74174	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-5428	09/06/11 18:52	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 74174	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-5428	09/06/11 20:27	Iron	0.51	0.05	0.5		102	85 - 115	
		Manganese	0.20	0.02	0.2		101	85 - 115	

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

Sample ID	RunNo: 74174	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108582-001ES	09/06/11 19:11	Iron	0.56	0.05	0.5	0.09	94.7	70 - 130	
		Manganese	0.84	0.02	0.2	0.66	92.7	70 - 130	

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

Sample ID	RunNo: 74174	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109020-001ED	09/06/11 21:17	Iron	1.37	0.05	1.39	2.01		20	
		Manganese	ND	0.02	ND			20	

**Suspended Natural Uranium**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 74361	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	09/09/11 12:24	Uranium Suspended	ND	0.0003					

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

Sample ID	RunNo: 74361	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	09/09/11 12:20	Uranium Suspended	0.103	0.0003	0.1		103	85 - 115	

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

Sample ID	RunNo: 74361	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1108581-001FS	09/09/11 13:20	Uranium Suspended	1.15	0.0003	1.1	0.0003	105	70 - 130	

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

Sample ID	RunNo: 74361	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1108581-001FMSD	09/09/11 13:24	Uranium Suspended	1.17	0.0003	1.15	1.33	106	20	

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

Sample ID	RunNo: 74361	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108581-001FD	09/09/11 13:08	Uranium Suspended	0.0003	0.0003	0.0003	5.08		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:** S1108582  
**Project:** Reno Creek Project

**Date:** 10/14/2011  
**Report ID:** S1108582001

**pH Water**

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/01/11 16:16	pH	8.6	0.1	8.48		102	90 - 110	

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

Sample ID	RunNo: 74055	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1108582-001AD	09/01/11 17:59	pH	8.4	0.1	8.4	0.424		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) 692-8945

This is a LEGAL DOCUMENT. All shaded fields must be completed. See reverse for instructions. #RC 08366

- CHAIN OF CUSTODY RECORD -

Client Name: AUC LLC  
 Report Address: Reno Creek Project  
 Project Identification: Reno Creek Project  
 Contact Name: Tracy Nickerson  
 Sampler (Signature/Printed): Tracy Nickerson  
 Telephone #: 307-265-0692

Invoice Address: AUC LLC  
 pcavendor@auc-llc.com  
 trnickerson@treccorp.com; jshriver@treccorp.com  
 Email: trnickerson@treccorp.com  
 Phone: 307-265-0692  
 Purchase Order #: 1108532-0692  
 Quote #: 1108532-0692

ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SAMPLE IDENTIFICATION	Matrix	# of Containers	ANALYSES/ PARAMETERS	REMARKS
1							See Attached Table 1 (4,14, Guide 8, Radon 222)	
2	1108532-0692	8/30/11	11:00	UM4-003-1108330	W	13	See Attached Table 2 (Air Particulate)	Color and water
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) Tracy Nickerson  
 DATE: 8/30/11  
 TIME: 10:30

SHIPPING INFO: UPS  
 MATRIX CODES: W1, SL, SD, TB, OT  
 TURNAROUND TIMES: Check desired service, Standard turnaround, RUSH - 5 Working Days, URGENT - < 2 Working Days  
 COMPLIANCE INFORMATION: Compliance Monitoring? Y/N, Program (SDWA, NPDES, ...), PWSID / Permit #, Chlorinated? Y/N, Sample Disposal: Lab/Client

ADDITIONAL REMARKS: 11.7  
 Rush & Urgent Surcharges will be applied