



Tuesday, November 22, 2011

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

RE: Reno Creek Project  
Orde

r No.: S1109408

Dear Phil Cavendor:

Inter-Mountain Laboratories received sample UM2-002-110919 on September 21, 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: 11/22/2011

**CLIENT:** AUC LLC  
**Project:** Reno Creek Project  
**Lab Order:** S1109408

**CASE NARRATIVE**  
**Report ID:** S1109408001

Sample UM2-002-110919 was received on September 21, 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 Energy Laboratories, Inc (ELI) NEHA Certification #: 101188 AL

Qualifiers by sample

- S1109408-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- LCS-R75588 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- MB-R75588 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- S1110086-001 - Cations/Sodium - Spike Recovery outside accepted recovery limits (2)
- S1110094-001 - Radiochemistry/Radium 228 (Dissolved) - Spike Recovery outside accepted recovery limits (1)

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

(2) Spike recovery outside acceptance criteria due to presence of analyte in the sample that greatly exceeded level of spike used. Data approved because all other QC were within acceptance 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: S1109408-001
ClientSample ID: UM2-002-110919
COC: RC 08336

Date Reported 11/22/2011
Report ID S1109408001
WorkOrder: S1109408
CollectionDate: 9/19/2011 3:15:00 PM
DateReceived: 9/21/2011 11:42:00 AM
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

**Date Reported** 11/22/2011  
**Report ID** S1109408001

**ProjectName:** Reno Creek Project  
**Lab ID:** S1109408-001  
**ClientSample ID:** UM2-002-110919  
**COC:** RC 08336

**WorkOrder:** S1109408  
**CollectionDate:** 9/19/2011 3:15:00 PM  
**DateReceived:** 9/21/2011 11:42:00 AM  
**FieldSampler:** TN  
**Matrix:** Water

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	77	mg/L		5	SM 2320B	9/23/2011 7:58:34 PM	AMB
Alkalinity, Bicarbonate as HCO3	ND	mg/L		5	SM 2320B	9/23/2011 7:58:34 PM	AMB
Alkalinity, Carbonate as CO3	46	mg/L		5	SM 2320B	9/23/2011 7:58:34 PM	AMB
Chloride	16	mg/L		1	EPA 300.0	10/7/2011 8:56:00 PM	ARF
Fluoride	0.3	mg/L		0.1	SM 4500FC	9/23/2011 7:58:34 PM	AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	10/2/2011 4:54:00 PM	MEL
Sulfate	277	mg/L		1	EPA 300.0	9/28/2011 9:01:00 PM	ARF
Calcium	19	mg/L		1	EPA 200.7	10/6/2011 2:41:26 PM	DG
Magnesium	ND	mg/L		1	EPA 200.7	10/6/2011 2:41:26 PM	DG
Potassium	26	mg/L		1	EPA 200.7	9/22/2011 12:48:04 PM	DG
Sodium	157	mg/L		1	EPA 200.7	10/6/2011 2:41:26 PM	DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	9/30/2011 4:44:00 PM	MEL
Silica as SiO2	6	mg/L		1	EPA 200.7	9/22/2011 12:48:04 PM	AB
<b>General Parameters</b>							
pH	10.4	s.u.		0.1	SM 4500 H B	9/23/2011 7:58:34 PM	AMB
Electrical Conductivity	1000	µmhos/cm		5	SM 2510B	9/23/2011 7:58:34 PM	AMB
Total Dissolved Solids (180)	580	mg/L		10	SM 2540	9/21/2011 2:15:00 PM	TH
<b>Data Quality</b>							
Cation Sum	8.42	meq/L		0.01	SM 1030E	10/11/2011 10:45:25 AM	LJK
Anion Sum	7.77	meq/L		0.01	SM 1030E	10/11/2011 10:45:25 AM	LJK
Cation-Anion Balance (± 5%)	4.02	%		0.01	SM 1030E	10/11/2011 10:45:25 AM	LJK
Solids, Total Dissolved (Calc)	550	mg/L		10	SM 1030E	10/11/2011 10:45:25 AM	LJK
Calculated TDS/TDS Ratio (0.80-1.20)	1.05	dec. %		0.01	Calculation	10/18/2011 9:44:30 AM	LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

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- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
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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: S1109408-001
ClientSample ID: UM2-002-110919
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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.

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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
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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.

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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

**Alkalinity**

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/23/11 12:43	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/23/11 12:35	Alkalinity, Total (As CaCO3)	604	5	601		100	90 - 110	

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109382-001AD	09/23/11 17:26	Alkalinity, Bicarbonate as HCO3	238	5	238	0.0517		20	
		Alkalinity, Carbonate as CO3	ND	5	ND			20	
		Alkalinity, Total (As CaCO3)	195	5	195	0.0517		20	

**Conductivity**

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/23/11 12:43	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/23/11 12:35	Electrical Conductivity	1090	5	1120		97.5	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 75008	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109382-001AD	09/23/11 17:26	Electrical Conductivity	2750	5	2760	0.362		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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

**Dissolved Mercury by EPA 245.1 - Water**

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

Sample ID	RunNo: 74958	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	09/23/11 8:18	Mercury	ND	0.001					

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

Sample ID	RunNo: 74958	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	09/23/11 8:16	Mercury	0.002	0.001	0.002		99.9	85 - 115	

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

Sample ID	RunNo: 74958	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109374-010D	09/23/11 9:33	Mercury	0.002	0.001	0.00244	ND	96.9	70 - 130	

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

Sample ID	RunNo: 74958	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1109374-010D	09/23/11 9:35	Mercury	0.002	0.001	0.002	4.62	92.4	20	

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

Sample ID	RunNo: 74958	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109374-010D	09/23/11 9:31	Mercury	ND	0.001	ND			20	

- Qualifiers:**
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  - H Holding times for preparation or analysis exceeded
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  - 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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

Sample ID	RunNo: 74947	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	09/22/11 11:55	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: 74947	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	09/22/11 11:58	Aluminum	1.0	0.1	1		99.2	85 - 115	
		Boron	0.9	0.1	1		92.3	85 - 115	
		Chromium	0.97	0.01	1		97.3	85 - 115	
		Iron	1.00	0.05	1		100	85 - 115	
		Manganese	1.01	0.02	1		101	85 - 115	
		Nickel	1.02	0.01	1		102	85 - 115	
		Zinc	1.02	0.01	1		102	85 - 115	

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

Sample ID	RunNo: 74947	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109419-003DS	09/22/11 13:34	Aluminum	0.7	0.1	0.5	0.3	89.1	70 - 130	
		Boron	0.4	0.1	0.5	ND	86.1	70 - 130	
		Chromium	0.46	0.01	0.5	ND	92.3	70 - 130	
		Iron	0.52	0.05	0.5	0.08	87.8	70 - 130	
		Manganese	0.48	0.02	0.5	ND	94.6	70 - 130	
		Nickel	0.45	0.01	0.5	ND	90.3	70 - 130	
		Zinc	0.47	0.01	0.5	ND	93.6	70 - 130	

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

Sample ID	RunNo: 74947	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1109419-003DSD	09/22/11 13:37	Aluminum	0.7	0.1	0.7	0.112	89.3	20	
		Boron	0.5	0.1	0.4	7.11	92.2	20	
		Chromium	0.46	0.01	0.46	0.650	91.7	20	
		Iron	0.51	0.05	0.52	1.83	85.9	20	
		Manganese	0.48	0.02	0.48	0.230	94.4	20	
		Nickel	0.44	0.01	0.45	3.50	87.1	20	
		Zinc	0.46	0.01	0.47	1.05	92.6	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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

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

Sample ID	RunNo: 74947	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109419-002DD	09/22/11 13:30	Aluminum	0.5	0.1	0.5	0.371		20	
		Boron	ND	0.1	ND			20	
		Chromium	ND	0.01	ND			20	
		Iron	0.14	0.05	0.14	0		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: 74864	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	09/21/11 12:06	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: 74864	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	09/21/11 12:02	Arsenic	0.101	0.005	0.1		101	85 - 115	
		Barium	ND	0.5	0.1		99.1	85 - 115	
		Cadmium	0.101	0.002	0.1		101	85 - 115	
		Copper	0.10	0.01	0.1		98.5	85 - 115	
		Lead	0.10	0.02	0.1		99.4	85 - 115	
		Molybdenum	0.10	0.02	0.1		99.9	85 - 115	
		Selenium	0.101	0.005	0.1		101	85 - 115	
		Uranium	0.097	0.001	0.1		97.0	85 - 115	
		Vanadium	0.10	0.02	0.1		96.8	85 - 115	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
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  - 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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

Sample ID	RunNo: 74864	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109403-001DS	09/21/11 14:15	Arsenic	1.13	0.005	1.1	ND	103	70 - 130	
		Barium	1.1	0.5	1.1	ND	100	70 - 130	
		Cadmium	1.11	0.002	1.1	ND	101	70 - 130	
		Copper	1.08	0.01	1.1	ND	98.4	70 - 130	
		Lead	1.11	0.02	1.1	ND	101	70 - 130	
		Molybdenum	1.09	0.02	1.1	ND	98.9	70 - 130	
		Selenium	1.14	0.005	1.1	ND	104	70 - 130	
		Uranium	1.06	0.001	1.1	ND	96.1	70 - 130	
		Vanadium	1.08	0.02	1.1	ND	97.9	70 - 130	

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

Sample ID	RunNo: 74864	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1109403-001DMSD	09/21/11 14:19	Arsenic	1.13	0.005	1.13	0.219	103	20	
		Barium	1.1	0.5	1.1	0.761	101	20	
		Cadmium	1.11	0.002	1.11	0.0503	101	20	
		Copper	1.08	0.01	1.08	0.490	97.9	20	
		Lead	1.12	0.02	1.11	0.252	101	20	
		Molybdenum	1.09	0.02	1.09	0.179	98.7	20	
		Selenium	1.14	0.005	1.14	0.122	104	20	
		Uranium	1.06	0.001	1.06	0.0517	96.2	20	
		Vanadium	1.08	0.02	1.08	0.168	97.8	20	

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

Sample ID	RunNo: 74864	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109403-001DD	09/21/11 14:11	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	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
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**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** AUC LLC  
**Work Order:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/23/11 12:43	Fluoride	ND	0.1					

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/23/11 12:35	Fluoride	3.0	0.1	2.96		100	90 - 110	

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109403-003ASPK	09/23/11 18:51	Fluoride	2.2	0.1	2.5	ND	86.4	80 - 120	

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109382-001AD	09/23/11 17:26	Fluoride	0.2	0.1	0.2	1.56		20	

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

Sample ID	RunNo: 77146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-324	11/20/11 20:37	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 77146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-324	11/20/11 20:37	Gross Alpha (Dissolved)	89	2	73.6		121	83 - 133	
		Gross Beta (Dissolved)	139	3	126		110	88 - 115	

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

Sample ID	RunNo: 77146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109408-001FMS	11/20/11 20:37	Gross Alpha (Dissolved)	151	2	147	7	97.9	48 - 153	
		Gross Beta (Dissolved)	306	3	252	24	112	60 - 140	

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

Sample ID	RunNo: 77146	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1111249-001FDUP	11/20/11 20:37	Gross Alpha (Dissolved)	66	2	81	19.1		20	
		Gross Beta (Dissolved)	32	3	33	0.358		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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

Sample ID	RunNo: 75148	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/28/11 9:19	Chloride	ND	1					
		Sulfate	ND	1					

Sample ID	RunNo: 75544	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	10/07/11 10:24	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 75148	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	09/28/11 9:31	Chloride	30	1	30		101	90 - 110	
		Sulfate	141	1	150		93.9	90 - 110	

Sample ID	RunNo: 75544	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	10/07/11 10:35	Chloride	30	1	30		99.9	90 - 110	
		Sulfate	141	1	150		94.2	90 - 110	

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

Sample ID	RunNo: 75148	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109416-002ASPK	09/28/11 22:05	Chloride	91	1	80	23	85.7	80 - 120	
		Sulfate	1020	1	640	444	90.5	80 - 120	

Sample ID	RunNo: 75544	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1110107-002ASPK	10/07/11 22:53	Chloride	11	1	10	2	92.4	80 - 120	
		Sulfate	437	1	80	355	103	80 - 120	

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

Sample ID	RunNo: 75148	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109416-002A	09/28/11 21:52	Chloride	22	5	23	0.899		20	
		Sulfate	450	10	440	0.210		20	

Sample ID	RunNo: 75544	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1110107-002AD	10/07/11 22:41	Chloride	2	1	2	7.04		20	
		Sulfate	382	1	355	7.35		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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

Sample ID	RunNo: 74933	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	09/22/11 11:55	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample ID	RunNo: 75478	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	10/06/11 13:39	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 74933	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	09/22/11 12:00	Calcium	37	1	40		92.5	85 - 115	
		Magnesium	37	1	40		91.9	85 - 115	
		Potassium	36	1	40		90.3	85 - 115	
		Sodium	39	1	40		97.9	85 - 115	

Sample ID	RunNo: 75478	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	10/06/11 13:44	Calcium	40	1	40		99.4	85 - 115	
		Magnesium	39	1	40		97.8	85 - 115	
		Potassium	40	1	40		99.3	85 - 115	
		Sodium	39	1	40		96.9	85 - 115	

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

Sample ID	RunNo: 74933	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109419-003AS	09/22/11 13:34	Calcium	49	1	50	ND	98.4	70 - 130	
		Magnesium	49	1	50	ND	98.2	70 - 130	
		Potassium	48	1	50	ND	96.3	70 - 130	
		Sodium	51	1	50	ND	103	70 - 130	

Sample ID	RunNo: 75478	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1110086-001AS	10/06/11 17:14	Calcium	71	1	50	24	95.1	70 - 130	
		Magnesium	58	1	50	13	89.6	70 - 130	
		Potassium	90	1	50	34	110	70 - 130	
		Sodium	736	1	50	738	-4.52	70 - 130	S

**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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

Sample ID	RunNo: 74933	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1109419-003ASD	09/22/11 13:37	Calcium	49	1	49	0.822	97.6	20	
		Magnesium	49	1	49	0.456	98.6	20	
		Potassium	48	1	48	1.06	95.3	20	
		Sodium	51	1	51	1.33	101	20	

Sample ID	RunNo: 75478	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1110086-001ASD	10/06/11 17:16	Calcium	73	1	71	2.24	98.3	20	
		Magnesium	59	1	58	3.08	93.2	20	
		Potassium	90	1	90	0.995	112	20	
		Sodium	739	1	736	0.369	0.922	20	S

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

Sample ID	RunNo: 74933	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109416-003AD	09/22/11 12:59	Calcium	80	1	82	2.18		20	
		Magnesium	84	1	85	1.44		20	
		Potassium	11	1	11	0.222		20	
		Sodium	179	1	179	0.0609		20	

Sample ID	RunNo: 75478	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1110085-002AD	10/06/11 17:09	Calcium	8	1	8	3.23		20	
		Magnesium	5	1	5	3.70		20	
		Potassium	7	1	8	3.40		20	
		Sodium	187	1	187	0.353		20	

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

Sample ID	RunNo: 75310	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	09/30/11 16:36	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 75310	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	09/30/11 16:38	Nitrogen, Ammonia (As N)	10.4	0.1	10		104	90 - 110	

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

Sample ID	RunNo: 75310	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109426-003B	09/30/11 16:54	Nitrogen, Ammonia (As N)	17.5	0.1	10	7.2	103	80 - 120	

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

Sample ID	RunNo: 75310	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109426-003B	09/30/11 16:53	Nitrogen, Ammonia (As N)	6.8	0.1	7.2	5.40		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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

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

Sample ID	RunNo: 75307	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	10/02/11 15:44	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 75307	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	10/02/11 15:46	Nitrogen, Nitrate-Nitrite (as N)	2.4	0.1	2.31		103	90 - 110	

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

Sample ID	RunNo: 75307	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109457-002B	10/02/11 17:02	Nitrogen, Nitrate-Nitrite (as N)	10.2	0.1	10	ND	102	80 - 120	

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

Sample ID	RunNo: 75307	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109457-002B	10/02/11 17:01	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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 76288	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-283 10/26/11 9:59 Lead 210 (Dissolved) ND 1

Sample ID	RunNo: 76290	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-283 10/26/11 17:48 Polonium 210 (Suspended) ND 1

Sample ID	RunNo: 76291	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-283 10/27/11 9:06 Lead 210 (Suspended) ND 1

Sample ID	RunNo: 77065	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-304 11/18/11 9:22 Polonium 210 (Dissolved) ND 1

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

Sample ID	RunNo: 76288	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-283 10/26/11 9:59 Lead 210 (Dissolved) 14 1 12.9 109 67.6 - 131

Sample ID	RunNo: 76290	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-283 10/26/11 17:48 Polonium 210 (Suspended) 11 1 12.9 87.6 48.6 - 156

Sample ID	RunNo: 76291	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-283 10/27/11 9:06 Lead 210 (Suspended) 14 1 12.9 109 60.3 - 141

Sample ID	RunNo: 77065	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-304 PO 11/18/11 9:22 Polonium 210 (Dissolved) 3 1 2.09 137 35.1 - 175

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

Sample ID	RunNo: 76288	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1109408-001FMS 10/26/11 9:59 Lead 210 (Dissolved) 16 1 12.9 2 106 66 - 133

Sample ID	RunNo: 76290	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1109223-001EMS 10/26/11 17:48 Polonium 210 (Suspended) 8 1 12.9 ND 59.2 28 - 173

Sample ID	RunNo: 76291	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1109223-001EMS 10/27/11 9:06 Lead 210 (Suspended) 14 1 12.9 ND 106 62.4 - 132

Sample ID	RunNo: 77065	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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TAP WATER MS 11/18/11 9:22 Polonium 210 (Dissolved) 12 1 12.9 ND 93.2 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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 77065	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
TAP WATER MSD	11/18/11 9:22	Polonium 210 (Dissolved)	14	1	12	14.6		30	

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

Sample ID	RunNo: 76290	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109223-003EDUP	10/26/11 17:48	Polonium 210 (Suspended)	ND	1	ND			20	

Sample ID	RunNo: 76291	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109223-003EDUP	10/27/11 9:06	Lead 210 (Suspended)	ND	1	ND			20	

Sample ID	RunNo: 76288	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
CENTRAL-1	10/26/11 9:59	Lead 210 (Dissolved)	ND	1	ND			20	

**Radium 228**

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

Sample ID	RunNo: 77157	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-319	11/18/11 17:02	Radium 228 (Dissolved)	ND	1					

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

Sample ID	RunNo: 77157	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-319	11/18/11 17:02	Radium 228 (Dissolved)	11	1	9.91		107	74.9 - 122	

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

Sample ID	RunNo: 77157	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1110094-001FMS	11/18/11 17:02	Radium 228 (Dissolved)	8	1	9.91	5	28.8	48.4 - 167	S

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

Sample ID	RunNo: 77157	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1110200-001FDUP	11/18/11 17:02	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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 75610	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-277	10/11/11 12:45	Radium 226 (Dissolved)	ND	0.2					
		Radium 226 (Suspended)	ND	0.2					

Sample ID	RunNo: 75818	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-278	10/11/11 16:13	Radium 226 (Dissolved)	ND	0.2					

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

Sample ID	RunNo: 75610	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-277	10/11/11 12:45	Radium 226 (Dissolved)	4.9	0.2	5.06		96.8	62.5 - 125	
		Radium 226 (Suspended)	4.9	0.2	5.06		96.8	56.4 - 132	

Sample ID	RunNo: 75818	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-278	10/11/11 16:13	Radium 226 (Dissolved)	4.8	0.2	5.06		95.1	62.5 - 125	

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

Sample ID	RunNo: 75610	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109408-001FMS	10/11/11 12:45	Radium 226 (Suspended)	5.4	0.2	5.06	ND	106	51.4 - 135	

Sample ID	RunNo: 75818	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109342-005DMS	10/11/11 16:13	Radium 226 (Dissolved)	5.2	0.2	5.06	ND	103	41.6 - 146	

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

Sample ID	RunNo: 75610	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109223-004EDUP	10/11/11 12:45	Radium 226 (Suspended)	ND	0.2	ND			20	

Sample ID	RunNo: 75818	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109342-004DDUP	10/11/11 16:13	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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

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

Sample ID	RunNo: 76156	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-291	10/22/11 11:45	Thorium 230 (Dissolved)	ND	0.2					
		Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 76156	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-291	10/22/11 11:46	Thorium 230 (Dissolved)	12	0.2	12		93.3	67.1 - 134	
		Thorium 230 (Suspended)	12	0.2	12		93.3	69.2 - 127	

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

Sample ID	RunNo: 76156	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109408-001FDUP	10/22/11 11:46	Thorium 230 (Dissolved)	ND	0.2	ND			20	
		Thorium 230 (Suspended)	ND	0.2	ND			20	

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

Sample ID	RunNo: 75588	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R75588	09/20/11 16:39	Radon-222	ND	100					L

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

Sample ID	RunNo: 75588	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R75588	09/20/11 16:39	Radon-222	300	100	306		99.3	70 - 130	L

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

Sample ID	RunNo: 75588	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109408-001A	09/20/11 16:39	Radon-222	4800	100	ND		0		L

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

Sample ID	RunNo: 74949	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	09/22/11 11:55	Silica as SiO2	ND	0.1					

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

Sample ID	RunNo: 74949	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	09/22/11 11:58	Silica as SiO2	2.1	0.1	2.14		98.3	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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

**Solids By SM 2540**

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

Sample ID	RunNo: 75047	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	09/21/11 12:40	Total Dissolved Solids (180)	ND	10					

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

Sample ID	RunNo: 75047	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	09/21/11 12:45	Total Dissolved Solids (180)	210	10	226		94.7	90 - 110	

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

Sample ID	RunNo: 75047	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109400-003A	09/21/11 13:10	Total Dissolved Solids (180)	2360	10	2310	2.25		20	

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

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

Sample ID	RunNo: 75051	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-5492	09/26/11 14:50	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 75051	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-5492	09/26/11 14:52	Iron	0.51	0.05	0.5		103	85 - 115	
		Manganese	0.20	0.02	0.2		101	85 - 115	

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

Sample ID	RunNo: 75051	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109408-001ES	09/26/11 14:57	Iron	0.57	0.05	0.5	0.09	96.6	70 - 130	
		Manganese	0.20	0.02	0.2	ND	97.3	70 - 130	

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

Sample ID	RunNo: 75051	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109433-001ED	09/26/11 15:13	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:** S1109408  
**Project:** Reno Creek Project

**Date:** 11/22/2011  
**Report ID:** S1109408001

**Suspended Natural Uranium**

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

Sample ID	RunNo: 75345	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	10/04/11 11:54	Uranium Suspended	ND	0.0003					

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

Sample ID	RunNo: 75345	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	10/04/11 11:50	Uranium Suspended	0.0984	0.0003	0.1		98.4	85 - 115	

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

Sample ID	RunNo: 75345	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1109223-001ES	10/04/11 12:58	Uranium Suspended	1.08	0.0003	1.1	ND	98.6	70 - 130	

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

Sample ID	RunNo: 75345	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1109223-001EMSD	10/04/11 13:02	Uranium Suspended	1.10	0.0003	1.08	1.36	99.9	20	

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

Sample ID	RunNo: 75345	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109223-001ED	10/04/11 12:54	Uranium Suspended	ND	0.0003	ND			20	

**pH Water**

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	09/23/11 12:35	pH	8.7	0.1	8.48		103	90 - 110	

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

Sample ID	RunNo: 75008	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1109382-001AD	09/23/11 17:26	pH	8.1	0.1	8.1	0.0203		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

Client Name: **AUC LLC**  
 Report Address: **pcavendor@auc-llc.com; mickerson@treccorp.com; jshriver@treccorp.com**  
 Invoice Address: **AUC LLC**  
 Project Identification: **Reno Creek Project**  
 Contract Name: **Traci Mickerson**  
 Email: **mickerson@treccorp.com**  
 Phone: **307-265-0696**  
 Purchase Order #:   
 Quote #:   
 Sampler (Signature/Printed): **Traci Mickerson**  
 Telephone #:

ANALYSES / PARAMETERS  
 See Attached Table 1 (4.14, Guide 8, Radon 222)  
 See Attached Table 2 (Air Particulate)  
 See Attached Table 3 (Vegetation)  
 See Attached Table 4 (Sediment)  
 See Attached Table 5 (Soil)  
 See Attached Table 8 WYDPDES Discharge  
 See Attached Table 9 (Blanks)  
 REMARKS: **Groundwater**

ITEM	LAB ID	DATE SAMPLED	TIME SAMPLED	SAMPLE IDENTIFICATION	Matrix	# of Containers	Received By (Signature/Printed)	DATE	TIME
1	21109408-01	9/19/11	15:15	UMA-002-110919 W		X	Kathy Boy	9/21/11	11:42
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

LAB COMMENTS: **Relinquished By (Signature/Printed): Traci Mickerson**  
 DATE: **9/21/11** TIME: **7:00**  
 RECEIVED BY: **Kathy Boy** DATE: **9/21/11** TIME: **11:42**  
 SHIPPING INFO:  UPS  Fed Express  US Mail  Hand Carried  Other  
 MATRIX CODES:  Water  Soil  Solid  Trip Blank  Other  
 TURNAROUND TIMES:  Check desired service  Standard turnaround  RUSH - 5 Working Days  URGENT - < 2 Working Days  
 COMPLIANCE INFORMATION:  Compliance Monitoring? Program (SDWA, NPDES, ...)  
 PWSID / Permit #:   
 Chlorinated?   
 Sample Disposal: Lab  Client   
 ADDITIONAL REMARKS: **4.1**