



Tuesday, July 19, 2011

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

RE: Reno Creek Project  
Orde

r No.: S1105270

Dear Phil Cavendor:

Inter-Mountain Laboratories received samples PZM15-002-110518 on May 18, 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: 7/19/2011

**CLIENT:** AUC LLC  
**Project:** Reno Creek Project  
**Lab Order:** S1105270

**CASE NARRATIVE**  
**Report ID:** S1105270002  
(Replaces S1105270001)

Sample PZM15-002-110518 was received on May 19, 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

S1105315-001 - Radiochemistry/Lead 210 (Suspended) - RPD outside accepted recovery limits  
S1105270-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory  
LCS-R70684 - General Parameters/Radon-222 - Analyzed by a contract laboratory  
MB-R70684 - 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:** S1105270-001  
**ClientSample ID:** PZM15-002-110518  
**COC:** RC 08277

**Date Reported:** 7/19/2011  
**Report ID:** S1105270002  
 (Replaces S1105270001)

**WorkOrder:** S1105270  
**CollectionDate:** 5/18/2011 2:40:00 PM  
**DateReceived:** 5/18/2011 4:41:00 PM  
**FieldSampler:** TN  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH Reading 1	8.34	s.u.			Field	5/18/2011 2:40:00 PM
pH Reading 2	8.35	s.u.			Field	5/18/2011 2:40:00 PM
pH Reading 3	8.34	s.u.			Field	5/18/2011 2:40:00 PM
Conductivity Reading 1	836	µmhos/cm			Field	5/18/2011 2:40:00 PM
Conductivity Reading 2	835	µmhos/cm			Field	5/18/2011 2:40:00 PM
Conductivity Reading 3	835	µmhos/cm			Field	5/18/2011 2:40:00 PM
Turbidity Reading 1	5.21	NTU			Field	5/18/2011 2:40:00 PM
Turbidity Reading 2	3.11	NTU			Field	5/18/2011 2:40:00 PM
Turbidity Reading 3	3.00	NTU			Field	5/18/2011 2:40:00 PM
Dissolved Oxygen Reading 1	0.22	mg/L			Field	5/18/2011 2:40:00 PM
Dissolved Oxygen Reading 2	0.22	mg/L			Field	5/18/2011 2:40:00 PM
Dissolved Oxygen Reading 3	0.22	mg/L			Field	5/18/2011 2:40:00 PM
Temperature Reading 1	10.85	°C			Field	5/18/2011 2:40:00 PM
Temperature Reading 2	10.88	°C			Field	5/18/2011 2:40:00 PM
Temperature Reading 3	10.86	°C			Field	5/18/2011 2:40:00 PM
Oxygen Reduction Potential Reading	-75.4	mV			Field	5/18/2011 2:40:00 PM
Oxygen Reduction Potential Reading	-72.4	mV			Field	5/18/2011 2:40:00 PM
Oxygen Reduction Potential Reading	-70.5	mV			Field	5/18/2011 2:40:00 PM
Purge Rate Reading 1	300	ml/min			Field	5/18/2011 2:40:00 PM
Purge Rate Reading 2	300	ml/min			Field	5/18/2011 2:40:00 PM
Purge Rate Reading 3	N/A	ml/min			Field	5/18/2011 2:40:00 PM
Water Level Reading 1	226.54	Ft			Field	5/18/2011 2:40:00 PM
Water Level Reading 2	226.60	Ft			Field	5/18/2011 2:40:00 PM
Water Level Reading 3	226.60	Ft			Field	5/18/2011 2:40:00 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:** S1105270-001  
**ClientSample ID:** PZM15-002-110518  
**COC:** RC 08277

**Date Reported:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**WorkOrder:** S1105270  
**CollectionDate:** 5/18/2011 2:40:00 PM  
**DateReceived:** 5/18/2011 4:41:00 PM  
**FieldSampler:** TN  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	111	mg/L		5	SM 2320B	5/19/2011 4:18:21 PM	AMB
Alkalinity, Bicarbonate as HCO3	135	mg/L		5	SM 2320B	5/19/2011 4:18:21 PM	AMB
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	5/19/2011 4:18:21 PM	AMB
Chloride	3	mg/L		1	EPA 300.0	5/26/2011 10:55:00 AM	KO
Fluoride	ND	mg/L		0.1	SM 4500FC	5/19/2011 4:18:21 PM	AMB
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	5/24/2011 3:02:00 PM	MEL
Sulfate	352	mg/L		1	EPA 300.0	5/26/2011 10:55:00 AM	KO
Calcium	48	mg/L		1	EPA 200.7	6/3/2011 12:13:59 PM	DG
Magnesium	10	mg/L		1	EPA 200.7	5/25/2011 2:20:43 PM	DG
Potassium	7	mg/L		1	EPA 200.7	5/25/2011 2:20:43 PM	DG
Sodium	129	mg/L		1	EPA 200.7	5/25/2011 2:20:43 PM	DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	5/19/2011 5:14:00 PM	LJK
Silica as SiO2	10	mg/L		1	EPA 200.7	5/20/2011 12:07:49 PM	DG
<b>General Parameters</b>							
pH	8.1	s.u.		0.1	SM 4500 H B	5/19/2011 4:18:21 PM	AMB
Electrical Conductivity	730	µmhos/cm		5	SM 2510B	5/19/2011 4:18:21 PM	AMB
Total Dissolved Solids (180)	600	mg/L		10	SM 2540	5/20/2011 12:40:00 PM	JF
<b>Data Quality</b>							
Cation Sum	9.03	meq/L		0.00	SM 1030E	6/16/2011 11:00:22 AM	LJK
Anion Sum	9.62	meq/L		0.00	SM 1030E	6/16/2011 11:00:22 AM	LJK
Cation-Anion Balance (± 5%)	3.18	%		0.00	SM 1030E	6/16/2011 11:00:22 AM	LJK
Solids, Total Dissolved (Calc)	620	mg/L		10	SM 1030E	6/16/2011 11:00:22 AM	LJK
Calculated TDS/TDS Ratio (0.80-1.20)	0.97	dec. %		0.01	Calculation	6/16/2011 11:02:09 AM	LJK

These results apply only to the samples tested.

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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: S1105270-001
ClientSample ID: PZM15-002-110518
COC: RC 08277

Date Reported 7/19/2011
Report ID S1105270002
(Replaces S1105270001)
WorkOrder: S1105270
CollectionDate: 5/18/2011 2:40:00 PM
DateReceived: 5/18/2011 4:41:00 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.

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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: S1105270-001
ClientSample ID: PZM15-002-110518
COC: RC 08277

Date Reported 7/19/2011
Report ID S1105270002
(Replaces S1105270001)
WorkOrder: S1105270
CollectionDate: 5/18/2011 2:40:00 PM
DateReceived: 5/18/2011 4:41:00 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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
 (Replaces S1105270001)

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	05/19/11 15:08	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	05/19/11 15:00	Alkalinity, Total (As CaCO3)	592	5	607		97.5	90 - 110	

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105270-001B	05/19/11 16:28	Alkalinity, Bicarbonate as HCO3	136	5	135	0.996		20	
		Alkalinity, Carbonate as CO3	ND	5	ND	0		20	
		Alkalinity, Total (As CaCO3)	112	5	111	0.996		20	

**Conductivity**Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	05/19/11 15:08	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	05/19/11 15:00	Electrical Conductivity	974	5	1000		97.3	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 70230	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105270-001B	05/19/11 16:28	Electrical Conductivity	735	5	730	0.685		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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**Dissolved Mercury by EPA 245.1 - Water**

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

Sample ID	RunNo: 70396	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	05/24/11 9:39	Mercury	ND	0.001					

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

Sample ID	RunNo: 70396	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	05/24/11 9:37	Mercury	0.002	0.001	0.002		92.3	85 - 115	

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

Sample ID	RunNo: 70396	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105245-001E	05/24/11 10:00	Mercury	0.002	0.001	0.00244	ND	86.8	70 - 130	

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

Sample ID	RunNo: 70396	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1105245-001E	05/24/11 10:02	Mercury	0.002	0.001	0.002	3.77	90.1	20	

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

Sample ID	RunNo: 70396	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105245-001E	05/24/11 9:58	Mercury	ND	0.001	ND	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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
 (Replaces S1105270001)

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

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

Sample ID	RunNo: 70280	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	05/20/11 11:39	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: 70280	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	05/20/11 11:42	Aluminum	1.0	0.1	1		103	85 - 115	
		Boron	1.0	0.1	1		99.0	85 - 115	
		Chromium	1.00	0.01	1		99.7	85 - 115	
		Iron	1.03	0.05	1		103	85 - 115	
		Manganese	1.04	0.02	1		104	85 - 115	
		Nickel	1.03	0.01	1		103	85 - 115	
		Zinc	0.98	0.01	1		97.6	85 - 115	

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

Sample ID	RunNo: 70280	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105298-001BS	05/20/11 12:49	Aluminum	11.0	0.1	10.5	ND	105	70 - 130	
		Boron	10.4	0.1	10.5	0.3	96.2	70 - 130	
		Chromium	9.95	0.01	10.5	ND	94.8	70 - 130	
		Iron	10.1	0.05	10.5	ND	95.7	70 - 130	
		Manganese	12.1	0.02	10.5	2.19	94.4	70 - 130	
		Nickel	9.86	0.01	10.5	ND	93.9	70 - 130	
		Zinc	9.44	0.01	10.5	ND	89.9	70 - 130	

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

Sample ID	RunNo: 70280	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1105298-001BSD	05/20/11 12:51	Aluminum	10.9	0.1	11.0	1.19	104	20	
		Boron	10.5	0.1	10.4	0.527	96.7	20	
		Chromium	9.84	0.01	9.95	1.17	93.7	20	
		Iron	9.91	0.05	10.1	1.46	94.3	20	
		Manganese	12.0	0.02	12.1	1.03	93.2	20	
		Nickel	9.75	0.01	9.86	1.07	92.9	20	
		Zinc	9.40	0.01	9.44	0.406	89.5	20	

- Qualifiers:**
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  - 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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

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

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

Sample ID	RunNo: 70280	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105297-002CD	05/20/11 12:44	Aluminum	ND	0.1	ND	0		20	
		Boron	0.2	0.1	0.2	2.53		20	
		Chromium	ND	0.01	ND	0		20	
		Iron	6.16	0.05	5.89	4.59		20	
		Manganese	0.53	0.02	0.50	4.86		20	
		Nickel	0.01	0.01	0.01	5.31		20	
		Zinc	ND	0.01	ND	0		20	

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

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

Sample ID	RunNo: 70237	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	05/19/11 12:42	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: 70237	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	05/19/11 12:38	Arsenic	0.102	0.005	0.1		102	85 - 115	
		Barium	ND	0.5	0.1		102	85 - 115	
		Cadmium	0.102	0.002	0.1		102	85 - 115	
		Copper	0.10	0.01	0.1		96.9	85 - 115	
		Lead	0.10	0.02	0.1		98.7	85 - 115	
		Molybdenum	0.10	0.02	0.1		103	85 - 115	
		Selenium	0.103	0.005	0.1		103	85 - 115	
		Uranium	0.102	0.001	0.1		102	85 - 115	
		Vanadium	0.10	0.02	0.1		100	85 - 115	

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  - E Value above quantitation range
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### ANALYTICAL QC SUMMARY REPORT

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**Work Order:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

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

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

Sample ID	RunNo: 70237	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105269-001ES	05/19/11 15:12	Arsenic	1.16	0.005	1.1	ND	105	70 - 130	
		Barium	1.2	0.5	1.1	ND	104	70 - 130	
		Cadmium	1.17	0.002	1.1	ND	106	70 - 130	
		Copper	1.06	0.01	1.1	ND	96.4	70 - 130	
		Lead	1.11	0.02	1.1	ND	101	70 - 130	
		Molybdenum	1.19	0.02	1.1	ND	108	70 - 130	
		Selenium	1.19	0.005	1.1	ND	108	70 - 130	
		Uranium	1.14	0.001	1.1	0.002	104	70 - 130	
		Vanadium	1.13	0.02	1.1	ND	103	70 - 130	

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

Sample ID	RunNo: 70237	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1105269-001EMSD	05/19/11 15:16	Arsenic	1.18	0.005	1.16	1.54	107	20	
		Barium	1.2	0.5	1.2	0.696	104	20	
		Cadmium	1.18	0.002	1.17	0.901	107	20	
		Copper	1.08	0.01	1.06	1.39	97.7	20	
		Lead	1.10	0.02	1.11	0.320	100	20	
		Molybdenum	1.20	0.02	1.19	1.24	109	20	
		Selenium	1.19	0.005	1.19	0.647	108	20	
		Uranium	1.14	0.001	1.14	0.168	104	20	
		Vanadium	1.15	0.02	1.13	1.73	105	20	

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

Sample ID	RunNo: 70237	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105269-001ED	05/19/11 15:08	Arsenic	ND	0.005	ND	0		20	
		Barium	ND	0.5	ND	0		20	
		Cadmium	ND	0.002	ND	0		20	
		Copper	ND	0.01	ND	0		20	
		Lead	ND	0.02	ND	0		20	
		Molybdenum	ND	0.02	ND	0		20	
		Selenium	ND	0.005	ND	0		20	
		Uranium	0.002	0.001	0.002	7.95		20	
		Vanadium	ND	0.02	ND	0		20	

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**CLIENT:** AUC LLC  
**Work Order:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**Fluoride by SM 4500**

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	05/19/11 15:08	Fluoride	ND	0.1					

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	05/19/11 15:00	Fluoride	2.9	0.1	2.71		105	90 - 110	

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105281-002ASPK	05/19/11 19:01	Fluoride	2.5	0.1	2.5	ND	97.5	80 - 120	

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105270-001B	05/19/11 16:28	Fluoride	ND	0.1	ND	0		20	

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

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

Sample ID	RunNo: 70773	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-151	06/01/11 19:45	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 70773	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-151	06/01/11 19:45	Gross Alpha (Dissolved)	75	2	69		108	76.7 - 133	
		Gross Beta (Dissolved)	127	3	130		98.2	76.7 - 133	

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

Sample ID	RunNo: 70773	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105254-001GMS	06/01/11 19:45	Gross Alpha (Dissolved)	64	2	69	ND	92.1	47.8 - 153	
		Gross Beta (Dissolved)	150	3	130	5	112	47.8 - 153	

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

Sample ID	RunNo: 70773	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105254-002FDUP	06/01/11 19:45	Gross Alpha (Dissolved)	ND	2	ND	0		20	
		Gross Beta (Dissolved)	8	3	8	3.45		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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**Anions by ION Chromatography**

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

Sample ID	RunNo: 70502	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	05/26/11 10:17	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 70502	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	05/26/11 9:51	Chloride	30	1	30		101	90 - 110	
		Sulfate	144	1	150		95.9	90 - 110	

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

Sample ID	RunNo: 70502	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105408-003ASPK	05/26/11 16:05	Chloride	59	1	30	29	103	80 - 120	
		Sulfate	342	1	240	102	100	80 - 120	

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

Sample ID	RunNo: 70502	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105408-003A	05/26/11 15:52	Chloride	28	1	29	0.305		20	
		Sulfate	101	1	102	0.316		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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
 (Replaces S1105270001)

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

Sample ID	RunNo: 70442	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	05/25/11 13:56	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample ID	RunNo: 70749	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	06/03/11 10:53	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 70442	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	05/25/11 14:00	Calcium	38	1	40		95.9	85 - 115	
		Magnesium	40	1	40		99.3	85 - 115	
		Potassium	39	1	40		97.3	85 - 115	
		Sodium	39	1	40		98.2	85 - 115	

Sample ID	RunNo: 70749	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	06/03/11 10:58	Calcium	41	1	40		101	85 - 115	
		Magnesium	40	1	40		98.7	85 - 115	
		Potassium	40	1	40		99.7	85 - 115	
		Sodium	38	1	40		95.7	85 - 115	

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

Sample ID	RunNo: 70442	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105353-002AS	05/25/11 14:39	Calcium	28	1	25	4	98.6	70 - 130	
		Magnesium	26	1	25	ND	103	70 - 130	
		Potassium	27	1	25	2	101	70 - 130	
		Sodium	26	1	25	2	97.6	70 - 130	

Sample ID	RunNo: 70749	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106036-001AS	06/03/11 12:32	Calcium	1740	1	1280	461	101	70 - 130	
		Magnesium	2660	1	1280	1490	91.9	70 - 130	
		Potassium	1490	1	1280	30	114	70 - 130	
		Sodium	5720	1	1280	4610	87.5	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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
 (Replaces S1105270001)

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

Sample ID	RunNo: 70442	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1105353-002ASD	05/25/11 14:41	Calcium	29	1	28	1.53	100	20	
		Magnesium	27	1	26	0.407	103	20	
		Potassium	28	1	27	1.26	103	20	
		Sodium	27	1	26	1.33	99.0	20	

Sample ID	RunNo: 70749	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106036-001ASD	06/03/11 12:34	Calcium	1750	1	1740	0.289	101	20	
		Magnesium	2620	1	2660	1.68	88.4	20	
		Potassium	1480	1	1490	0.752	114	20	
		Sodium	5720	1	5720	0.130	86.9	20	

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

Sample ID	RunNo: 70442	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105353-001AD	05/25/11 14:34	Calcium	4	1	4	0.337		20	
		Magnesium	ND	1	ND	0		20	
		Potassium	ND	1	ND	0		20	
		Sodium	ND	1	ND	0		20	

Sample ID	RunNo: 70749	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106032-001BD	06/03/11 12:25	Calcium	129	1	131	1.28		20	
		Magnesium	134	1	136	1.52		20	
		Potassium	15	1	15	0.973		20	
		Sodium	80	1	81	1.31		20	

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

Sample ID	RunNo: 70224	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	05/19/11 16:17	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 70224	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	05/19/11 16:19	Nitrogen, Ammonia (As N)	8.8	0.1	8.93		98.0	90 - 110	

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

Sample ID	RunNo: 70224	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105297-002B	05/19/11 17:22	Nitrogen, Ammonia (As N)	11.0	0.1	10	1.9	91.2	80 - 120	

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

Sample ID	RunNo: 70224	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105297-002B	05/19/11 17:21	Nitrogen, Ammonia (As N)	1.8	0.1	1.9	3.56		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

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**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

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

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

Sample ID	RunNo: 70364	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	05/24/11 14:17	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 70364	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	05/24/11 14:19	Nitrogen, Nitrate-Nitrite (as N)	7.4	0.1	7.69		96.1	90 - 110	

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

Sample ID	RunNo: 70364	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105312-007B	05/24/11 14:51	Nitrogen, Nitrate-Nitrite (as N)	10.9	0.1	10	0.6	103	80 - 120	

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

Sample ID	RunNo: 70364	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105312-007B	05/24/11 14:50	Nitrogen, Nitrate-Nitrite (as N)	0.6	0.1	0.6	0.583		20	

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 70805	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-144	06/06/11 11:16	Polonium 210 (Dissolved)	ND	1					

Sample ID	RunNo: 70806	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-144	06/04/11 15:35	Lead 210 (Dissolved)	ND	1					

Sample ID	RunNo: 71067	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-146	06/13/11 11:42	Polonium 210 (Suspended)	ND	1					

Sample ID	RunNo: 71075	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-146	06/13/11 8:36	Lead 210 (Suspended)	ND	1					

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

Sample ID	RunNo: 70805	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-144 PO	06/06/11 11:16	Polonium 210 (Dissolved)	5	1	4.65		115	35.1 - 175	

Sample ID	RunNo: 70806	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-144	06/04/11 15:35	Lead 210 (Dissolved)	14	1	13.1		106	35.1 - 175	

Sample ID	RunNo: 71067	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-146 PO	06/13/11 11:42	Polonium 210 (Suspended)	2	1	4.53		51.8	35.1 - 175	

- 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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 71075	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-146	06/13/11 8:36	Lead 210 (Suspended)	12	1	13.1		95.3	35.1 - 175	

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

Sample ID	RunNo: 70805	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105245-001GMS	06/06/11 11:16	Polonium 210 (Dissolved)	9	1	13.1	ND	69.5	20.9 - 160	

Sample ID	RunNo: 70806	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105252-001GMS	06/04/11 15:35	Lead 210 (Dissolved)	13	1	13.1	1	91.8	20.9 - 160	

Sample ID	RunNo: 71067	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105245-001GMS	06/13/11 11:42	Polonium 210 (Suspended)	9	1	13.1	ND	69.5	20.9 - 160	

Sample ID	RunNo: 71075	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105245-001GMS	06/13/11 8:36	Lead 210 (Suspended)	13	1	13.1	ND	98.9	20.9 - 160	

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

Sample ID	RunNo: 70805	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105270-001GDUP	06/06/11 11:16	Polonium 210 (Dissolved)	ND	1	ND	0		20	

Sample ID	RunNo: 70806	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105270-001GDUP	06/06/11 17:51	Lead 210 (Dissolved)	ND	1	ND	0		20	

Sample ID	RunNo: 71067	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105315-001FDUP	06/15/11 19:55	Polonium 210 (Suspended)	ND	1	ND	0		20	

Sample ID	RunNo: 71075	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105315-001FDUP	06/14/11 19:55	Lead 210 (Suspended)	3	1	1	89.7		20	R

- 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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**Radium 228**

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

Sample ID	RunNo: 71236	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-158B	06/14/11 14:57	Radium 228 (Dissolved)	ND	1					

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

Sample ID	RunNo: 71236	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-158B	06/14/11 14:57	Radium 228 (Dissolved)	10	1	10.3		92.9	74.9 - 122	

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

Sample ID	RunNo: 71236	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105282-001AMS	06/14/11 14:57	Radium 228 (Dissolved)	13	1	10.3	2	99.7	48.4 - 167	

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

Sample ID	RunNo: 71236	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105282-002ADUP	06/14/11 14:57	Radium 228 (Dissolved)	ND	1	ND	0		20	

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 71079	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-143	06/07/11 11:36	Radium 226 (Dissolved)	ND	0.2					

Sample ID	RunNo: 71121	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-151	06/15/11 9:26	Radium 226 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 71079	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-143	06/07/11 11:36	Radium 226 (Dissolved)	5.0	0.2	5		100	62.5 - 125	

Sample ID	RunNo: 71121	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-151	06/15/11 0:00	Radium 226 (Suspended)	3.8	0.2	5.88		65.3	62.5 - 125	

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

Sample ID	RunNo: 71079	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105286-001CMS	06/07/11 18:39	Radium 226 (Dissolved)	74.0	0.2	5	68.9	102	41.6 - 146	

Sample ID	RunNo: 71121	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105253-001FMS	06/15/11 9:26	Radium 226 (Suspended)	4.1	0.2	5	ND	82.7	41.6 - 146	

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

Sample ID	RunNo: 71079	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105286-002CDUP	06/07/11 18:39	Radium 226 (Dissolved)	ND	0.2	ND	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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 71121	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105253-002EDUP	06/15/11 9:26	Radium 226 (Suspended)	ND	0.2	ND	0		20	

**Thorium 230 in Water**

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

Sample ID	RunNo: 70887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-144	06/07/11 8:50	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 71145	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-152	06/13/11 8:51	Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 70887	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-144	06/07/11 8:50	Thorium 230 (Dissolved)	12	0.2	12		97.5	67.1 - 134	

Sample ID	RunNo: 71145	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-152	06/13/11 8:51	Thorium 230 (Suspended)	14	0.2	12		114	67.1 - 134	

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

Sample ID	RunNo: 70887	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105253-001FDUP	06/07/11 8:50	Thorium 230 (Dissolved)	ND	0.2	ND	0		20	

Sample ID	RunNo: 71145	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105324-001GDUP	06/13/11 8:51	Thorium 230 (Suspended)	ND	0.2	ND	0		20	

**Radon 222 by SM7500-RN**

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

Sample ID	RunNo: 70684	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R70684	05/19/11 0:00	Radon-222	ND	50					L

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

Sample ID	RunNo: 70684	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R70684	05/19/11 0:00	Radon-222	22100	100	22500		98.2	75 - 125	L

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

Sample ID	RunNo: 70684	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105270-001B	05/19/11 0:00	Radon-222	2080	50	2120	1.89		20	L

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

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** AUC LLC  
**Work Order:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
 (Replaces S1105270001)

**Silica as SiO<sub>2</sub>**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 70281	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	05/20/11 11:39	Silica as SiO <sub>2</sub>	ND	0.1					

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

Sample ID	RunNo: 70281	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	05/20/11 11:42	Silica as SiO <sub>2</sub>	2.2	0.1	2.14		103	85 - 115	

**Solids By SM 2540**Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 70382	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	05/20/11 11:10	Total Dissolved Solids (180)	ND	10					

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

Sample ID	RunNo: 70382	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	05/20/11 11:15	Total Dissolved Solids (180)	230	10	226		100	90 - 110	

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

Sample ID	RunNo: 70382	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105262-004B	05/20/11 12:20	Total Dissolved Solids (180)	6680	10	6670	0.150		20	

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

Sample ID	RunNo: 70334	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK 5/23 TOT -5145	05/23/11 15:57	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 70334	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS 5/23 TOT -5145	05/23/11 16:00	Iron	0.47	0.05	0.5		93.6	85 - 115	
		Manganese	0.19	0.02	0.2		94.1	85 - 115	

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

Sample ID	RunNo: 70334	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105267-001ES	05/23/11 16:27	Iron	0.51	0.05	0.5	0.06	91.4	70 - 130	
		Manganese	0.22	0.02	0.2	0.03	96.4	70 - 130	

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

Sample ID	RunNo: 70334	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1105267-001ESD	05/23/11 16:30	Iron	0.52	0.05	0.51	0.662	92.0	20	
		Manganese	0.22	0.02	0.22	0.946	97.5	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:** S1105270  
**Project:** Reno Creek Project

**Date:** 7/19/2011  
**Report ID:** S1105270002  
(Replaces S1105270001)

**Suspended Natural Uranium**

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

Sample ID	RunNo: 70440	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	05/25/11 11:04	Uranium Suspended	0.0999	0.0003	0.1		99.9	85 - 115	

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

Sample ID	RunNo: 70440	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105245-001HS	05/25/11 16:53	Uranium Suspended	1.11	0.0003	1.1	ND	101	70 - 130	

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

Sample ID	RunNo: 70440	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1105245-001HMSD	05/25/11 17:05	Uranium Suspended	1.08	0.0003	1.11	2.55	98.0	20	

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

Sample ID	RunNo: 70440	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105245-001HD	05/25/11 16:49	Uranium Suspended	ND	0.0003	ND	0		20	

**pH Water**

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	05/19/11 15:00	pH	8.5	0.1	8.63		98.8	90 - 110	

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

Sample ID	RunNo: 70230	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105270-001B	05/19/11 16:28	pH	8.2	0.1	8.1	1.40		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

This is a LEGAL DOCUMENT. All shaded fields must be completed. See reverse for instructions. #RC 08277

- CHAIN OF CUSTODY RECORD -

Client Name: **AUC LLC** Project Identification: **Reno Creek Project** Sampler (Signature/Printed): *Tracey Nickerson* Telephone #: \_\_\_\_\_

Report Address: **pcavendor@auc-llc.com; tricketson@treecorp.com; jshriver@treecorp.com** Contact Name: *Tracey Nickerson* Email: *tricketson@treecorp.com* Phone: *307-265-0696* Purchase Order #: \_\_\_\_\_ Quote #: \_\_\_\_\_

Invoice Address: **AUC LLC** *951 Wooten Ct Ste 395 Casper WY 82401* **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 WYDES Discharge  
 See Attached Table 9 (Blanks)

ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME	SAMPLE IDENTIFICATION	Matrix	# of Containers	REMARKS
1							
2	<i>51105270-00</i>	<i>5/18/11</i>	<i>1440</i>	<i>P2M15-002-110518</i>		<i>13</i>	<i>Groundwater</i>
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

LAB COMMENTS: *Relinquished By (Signature/Printed)* *Tracey Nickerson* DATE: *5/18/11* TIME: *11:04 AM*

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?  Y  N Program (SDWA, NPDES,...) PWSID / Permit # \_\_\_\_\_ Chlorinated?  Y  N Sample Disposal: Lab  Client

ADDITIONAL REMARKS: \_\_\_\_\_

INTERMOUNTAIN LABS www.intermountainlabs.com

Rev 4.5