



Tuesday, January 31, 2012

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

RE: Reno Creek Project
Orde

r No.: S1112369

Dear Phil Cavendor:

Inter-Mountain Laboratories received sample PZM2-003-111220 on December 20, 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: 1/31/2012

CLIENT: AUC LLC
Project: Reno Creek Project
Lab Order: S1112369

CASE NARRATIVE
Report ID: S1112369001

Sample PZM2-003-111220 was received on December 20, 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.

Total Dissolved Solids (TDS)- Run out of holding due to technician error. An entire batch of samples, including PZM2-003-111220, was lost when the technician misidentified the batch as complete. The misidentification lead to the technician disposing of the batch prior to completion. The out of holding TDS analytical result compared acceptably with the calculated TDS.

Qualifiers by sample

S1112369-001 - General Parameters/Total Dissolved Solids (180) - Holding times for preparation or analysis exceeded
S1112369-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory
LCS-R78738 - General Parameters/Radon-222 - Analyzed by a contract laboratory
MB-R78738 - General Parameters/Radon-222 - Analyzed by a contract laboratory
S1112389-003 - General Parameters/Total Dissolved Solids (180) - Holding times for preparation or analysis exceeded

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: S1112369-001
ClientSample ID: PZM2-003-111220
COC: RC 08160

Date Reported: 1/31/2012
Report ID: S1112369001

WorkOrder: S1112369
CollectionDate: 12/20/2011 1:30:00 PM
DateReceived: 12/20/2011 4:30:00 PM
FieldSampler: TN
Matrix: Water

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Field						
pH Reading 1	8.59	s.u.			Field	12/20/2011 1:30:00 PM
pH Reading 2	8.59	s.u.			Field	12/20/2011 1:30:00 PM
pH Reading 3	8.60	s.u.			Field	12/20/2011 1:30:00 PM
Conductivity Reading 1	1833	µmhos/cm			Field	12/20/2011 1:30:00 PM
Conductivity Reading 2	1835	µmhos/cm			Field	12/20/2011 1:30:00 PM
Conductivity Reading 3	1833	µmhos/cm			Field	12/20/2011 1:30:00 PM
Turbidity Reading 1	3.9	NTU			Field	12/20/2011 1:30:00 PM
Turbidity Reading 2	4.6	NTU			Field	12/20/2011 1:30:00 PM
Turbidity Reading 3	4.6	NTU			Field	12/20/2011 1:30:00 PM
Dissolved Oxygen Reading 1	1.35	mg/L			Field	12/20/2011 1:30:00 PM
Dissolved Oxygen Reading 2	1.30	mg/L			Field	12/20/2011 1:30:00 PM
Dissolved Oxygen Reading 3	1.26	mg/L			Field	12/20/2011 1:30:00 PM
Temperature Reading 1	10.00	°C			Field	12/20/2011 1:30:00 PM
Temperature Reading 2	10.19	°C			Field	12/20/2011 1:30:00 PM
Temperature Reading 3	10.30	°C			Field	12/20/2011 1:30:00 PM
Oxygen Reduction Potential Reading	-32.0	mV			Field	12/20/2011 1:30:00 PM
Oxygen Reduction Potential Reading	-77.1	mV			Field	12/20/2011 1:30:00 PM
Oxygen Reduction Potential Reading	-166.8	mV			Field	12/20/2011 1:30:00 PM
Purge Rate Reading 1	400	ml/min			Field	12/20/2011 1:30:00 PM
Purge Rate Reading 2	400	ml/min			Field	12/20/2011 1:30:00 PM
Purge Rate Reading 3	400	ml/min			Field	12/20/2011 1:30:00 PM
Water Level Reading 1	305.63	Ft			Field	12/20/2011 1:30:00 PM
Water Level Reading 2	305.64	Ft			Field	12/20/2011 1:30:00 PM
Water Level Reading 3	305.65	Ft			Field	12/20/2011 1:30:00 PM

These results apply only to the samples tested.

RL - Reporting Limit

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: 
 Lacey Ketron, Water Lab Supervisor



Sample Analysis Report

Company: AUC LLC
1536 Cole Blvd
Lakewood, CO 80401
ProjectName: Reno Creek Project
Lab ID: S1112369-001
ClientSample ID: PZM2-003-111220
COC: RC 08160

Date Reported 1/31/2012
Report ID S1112369001
WorkOrder: S1112369
CollectionDate: 12/20/2011 1:30:00 PM
DateReceived: 12/20/2011 4:30:00 PM
FieldSampler: TN
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

These results apply only to the samples tested.

RL - Reporting Limit

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

- B Analyte detected in the associated Method Blank, E Value above quantitation range, J Analyte detected below quantitation limits, M Value exceeds Monthly Ave or MCL, O Outside the Range of Dilutions

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



Sample Analysis Report

Company: AUC LLC
1536 Cole Blvd
Lakewood, CO 80401
ProjectName: Reno Creek Project
Lab ID: S1112369-001
ClientSample ID: PZM2-003-111220
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Date Reported: 1/31/2012
Report ID: S1112369001
WorkOrder: S1112369
CollectionDate: 12/20/2011 1:30:00 PM
DateReceived: 12/20/2011 4:30:00 PM
FieldSampler: TN
Matrix: Water

Comments

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

These results apply only to the samples tested.

RL - Reporting Limit

- 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
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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: S1112369-001
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DateReceived: 12/20/2011 4:30:00 PM
FieldSampler: TN
Matrix: Water

Comments

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

These results apply only to the samples tested.

RL - Reporting Limit

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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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Alkalinity

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

Sample ID	RunNo: 78346	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	12/28/11 15:51	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 78346	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	12/28/11 15:41	Alkalinity, Total (As CaCO3)	594	5	601		98.9	90 - 110	

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

Sample ID	RunNo: 78346	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112396-001AD	12/28/11 23:37	Alkalinity, Bicarbonate as HCO3	425	5	422	0.762		20	
		Alkalinity, Carbonate as CO3	8	5	10	18.3		20	
		Alkalinity, Total (As CaCO3)	362	5	362	0.0839		20	

Conductivity

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 78346	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	12/28/11 15:51	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 78346	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	12/28/11 15:41	Electrical Conductivity	1060	5	1120		94.0	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 78346	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112396-001AD	12/28/11 23:37	Electrical Conductivity	1540	5	1540	0.521		20	

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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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Dissolved Mercury by EPA 245.1 - Water

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

Sample ID	RunNo: 78288	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	12/27/11 12:16	Mercury	ND	0.001					

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

Sample ID	RunNo: 78288	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	12/27/11 12:14	Mercury	0.002	0.001	0.002		101	85 - 115	

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

Sample ID	RunNo: 78288	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112368-001D	12/27/11 12:21	Mercury	0.003	0.001	0.00244	ND	104	70 - 130	

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

Sample ID	RunNo: 78288	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1112368-001D	12/27/11 12:23	Mercury	0.003	0.001	0.003	1.04		20	

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

Sample ID	RunNo: 78288	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112368-001D	12/27/11 12:20	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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Dissolved Metals by ICP - EPA 200.7 - Water

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

Sample ID	RunNo: 78251	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	12/23/11 8:43	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: 78251	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	12/23/11 8:46	Aluminum	1.0	0.1	1		100	85 - 115	
		Boron	1.0	0.1	1		99.4	85 - 115	
		Chromium	1.02	0.01	1		102	85 - 115	
		Iron	1.02	0.05	1		102	85 - 115	
		Manganese	1.03	0.02	1		103	85 - 115	
		Nickel	1.03	0.01	1		103	85 - 115	
		Zinc	1.01	0.01	1		101	85 - 115	

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

Sample ID	RunNo: 78251	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112401-004CS	12/23/11 10:48	Aluminum	0.6	0.1	0.5	ND	112	70 - 130	
		Boron	0.6	0.1	0.5	ND	105	70 - 130	
		Chromium	0.52	0.01	0.5	ND	104	70 - 130	
		Iron	0.53	0.05	0.5	ND	104	70 - 130	
		Manganese	0.51	0.02	0.5	ND	101	70 - 130	
		Nickel	0.49	0.01	0.5	ND	97.9	70 - 130	
		Zinc	0.51	0.01	0.5	ND	101	70 - 130	

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

Sample ID	RunNo: 78251	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1112401-004CSD	12/23/11 10:50	Aluminum	0.6	0.1	0.6	1.02		20	
		Boron	0.6	0.1	0.6	0.192		20	
		Chromium	0.51	0.01	0.52	1.69		20	
		Iron	0.52	0.05	0.53	0.952		20	
		Manganese	0.50	0.02	0.51	1.64		20	
		Nickel	0.48	0.01	0.49	1.53		20	
		Zinc	0.49	0.01	0.51	2.16		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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Dissolved Metals by ICP - EPA 200.7 - Water

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

Sample ID	RunNo: 78251	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112401-003CD	12/23/11 10:43	Aluminum	ND	0.1	ND			20	
		Boron	0.1	0.1	0.1	0.739		20	
		Chromium	ND	0.01	ND			20	
		Iron	ND	0.05	ND			20	
		Manganese	ND	0.02	ND			20	
		Nickel	ND	0.01	ND			20	
		Zinc	ND	0.01	ND			20	

Dissolved Metals by ICPMS EPA 200.8 - Water

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

Sample ID	RunNo: 78146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	12/21/11 11:44	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: 78146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	12/21/11 11:39	Arsenic	0.097	0.005	0.1		97.0	85 - 115	
		Barium	ND	0.5	0.1		95.1	85 - 115	
		Cadmium	0.096	0.002	0.1		96.3	85 - 115	
		Copper	0.10	0.01	0.1		98.2	85 - 115	
		Lead	0.10	0.02	0.1		102	85 - 115	
		Molybdenum	0.09	0.02	0.1		93.2	85 - 115	
		Selenium	0.097	0.005	0.1		96.6	85 - 115	
		Uranium	0.099	0.001	0.1		98.7	85 - 115	
		Vanadium	0.10	0.02	0.1		100	85 - 115	

- 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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Dissolved Metals by ICPMS EPA 200.8 - Water

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

Sample ID	RunNo: 78146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112373-001CS	12/21/11 15:00	Arsenic	1.07	0.005	1.1	ND	97.4	70 - 130	
		Barium	2.9	0.5	1.1	1.7	111	70 - 130	
		Cadmium	1.29	0.002	1.1	ND	117	70 - 130	
		Copper	1.26	0.01	1.1	ND	115	70 - 130	
		Lead	1.25	0.02	1.1	ND	114	70 - 130	
		Molybdenum	1.26	0.02	1.1	ND	114	70 - 130	
		Selenium	1.06	0.005	1.1	ND	96.1	70 - 130	
		Uranium	1.29	0.001	1.1	ND	117	70 - 130	
		Vanadium	1.31	0.02	1.1	ND	119	70 - 130	

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

Sample ID	RunNo: 78146	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1112373-001CMSD	12/21/11 15:05	Arsenic	1.07	0.005	1.07	0.164		20	
		Barium	2.7	0.5	2.9	6.52		20	
		Cadmium	1.05	0.002	1.29	18.6		20	
		Copper	1.08	0.01	1.26	14.9		20	
		Lead	1.04	0.02	1.25	16.8		20	
		Molybdenum	1.01	0.02	1.26	19.8		20	
		Selenium	1.08	0.005	1.06	2.41		20	
		Uranium	1.09	0.001	1.29	15.4		20	
		Vanadium	1.11	0.02	1.31	15.2		20	

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

Sample ID	RunNo: 78146	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112373-001CD	12/21/11 14:55	Arsenic	ND	0.005	ND			20	
		Barium	1.6	0.5	1.7	3.92		20	
		Cadmium	ND	0.002	ND			20	
		Copper	ND	0.01	ND			20	
		Lead	ND	0.02	ND			20	
		Molybdenum	ND	0.02	ND			20	
		Selenium	ND	0.005	ND			20	
		Uranium	ND	0.001	ND			20	
		Vanadium	ND	0.02	ND			20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
 - H Holding times for preparation or analysis exceeded
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 - O Outside the Range of Dilutions
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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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

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

Sample ID	RunNo: 78346	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	12/28/11 15:51	Fluoride	ND	0.1					

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

Sample ID	RunNo: 78346	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	12/28/11 15:41	Fluoride	2.8	0.1	2.96		93.3	90 - 110	

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

Sample ID	RunNo: 78346	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112389-001ASPK	12/28/11 20:52	Fluoride	2.5	0.1	2.5	0.1	94.5	80 - 120	

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

Sample ID	RunNo: 78346	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112396-001AD	12/28/11 23:37	Fluoride	0.2	0.1	0.2	4.11		20	

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

Sample ID	RunNo: 78974	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-010	01/12/12 17:43	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 78974	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-010	01/12/12 17:43	Gross Alpha (Dissolved)	85	2	73.6		115	83 - 133	
		Gross Beta (Dissolved)	137	3	126		109	88 - 115	

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

Sample ID	RunNo: 78974	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112367-002FMS	01/12/12 17:43	Gross Alpha (Dissolved)	67	2	73.6	7	81.9	48 - 153	
		Gross Beta (Dissolved)	145	3	126	6	110	60 - 140	

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

Sample ID	RunNo: 78974	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112367-003FDUP	01/16/12 17:40	Gross Alpha (Dissolved)	20	2	22	12.2		20	
		Gross Beta (Dissolved)	10	3	8	17.4		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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Anions by ION Chromatography

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

Sample ID	RunNo: 78230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	12/22/11 11:30	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 78230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	12/22/11 11:02	Chloride	30	1	30		101	90 - 110	
		Sulfate	141	1	150		93.7	90 - 110	

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

Sample ID	RunNo: 78230	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112370-001ASPK	12/22/11 20:40	Chloride	71	1	55	16	99.6	80 - 120	
		Sulfate	851	1	440	371	109	80 - 120	

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

Sample ID	RunNo: 78230	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112370-001A	12/22/11 20:26	Chloride	16	1	16	0.251		20	
		Sulfate	372	1	371	0.310		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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

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

Sample ID	RunNo: 78248	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	12/23/11 8:43	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 78248	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	12/23/11 8:48	Calcium	40	1	40		101	85 - 115	
		Magnesium	40	1	40		99.2	85 - 115	
		Potassium	40	1	40		99.5	85 - 115	
		Sodium	39	1	40		98.0	85 - 115	

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

Sample ID	RunNo: 78248	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112385-001AS	12/23/11 9:18	Calcium	83	1	50	32	101	70 - 130	
		Magnesium	60	1	50	9	102	70 - 130	
		Potassium	75	1	50	25	99.1	70 - 130	
		Sodium	156	1	50	106	100	70 - 130	

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

Sample ID	RunNo: 78248	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1112385-001ASD	12/23/11 9:20	Calcium	82	1	83	1.22		20	
		Magnesium	60	1	60	0.847		20	
		Potassium	74	1	75	0.796		20	
		Sodium	156	1	156	0.287		20	

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

Sample ID	RunNo: 78248	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112383-003AD	12/23/11 9:13	Calcium	416	1	444	6.34		20	
		Magnesium	369	1	391	5.74		20	
		Potassium	12	1	13	6.63		20	
		Sodium	403	1	430	6.44		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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Nitrogen, Ammonia (as N)

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

Sample ID	RunNo: 78317	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	12/28/11 9:21	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 78317	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	12/28/11 9:23	Nitrogen, Ammonia (As N)	9.6	0.1	10		96.2	90 - 110	

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

Sample ID	RunNo: 78317	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112383-003B	12/28/11 9:51	Nitrogen, Ammonia (As N)	9.7	0.1	10	0.2	95.2	80 - 120	

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

Sample ID	RunNo: 78317	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112383-003B	12/28/11 9:50	Nitrogen, Ammonia (As N)	0.2	0.1	0.2	7.98		20	

Nitrogen, Nitrate-Nitrite (as N)

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

Sample ID	RunNo: 78429	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	12/30/11 10:31	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 78429	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	12/30/11 10:33	Nitrogen, Nitrate-Nitrite (as N)	2.3	0.1	2.31		99.3	90 - 110	

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

Sample ID	RunNo: 78429	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112389-003B	12/30/11 11:19	Nitrogen, Nitrate-Nitrite (as N)	10.1	0.1	10	ND	101	80 - 120	

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

Sample ID	RunNo: 78429	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112389-003B	12/30/11 11:18	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1	ND				

- 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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

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

Sample ID	RunNo: 79023	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-003	01/17/12 11:27	Lead 210 (Dissolved)	ND	1					
Sample ID	RunNo: 79024	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-003	01/16/12 15:03	Polonium 210 (Dissolved)	ND	1					
Sample ID	RunNo: 79337	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-003	01/19/12 15:42	Polonium 210 (Suspended)	ND	1					
Sample ID	RunNo: 79338	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-003	01/20/12 13:07	Lead 210 (Suspended)	ND	1					

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

Sample ID	RunNo: 79023	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-003	01/17/12 11:27	Lead 210 (Dissolved)	12	1	12.8		95.1	67.6 - 131	
Sample ID	RunNo: 79024	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-003 PO	01/16/12 15:03	Polonium 210 (Dissolved)	2	1	1.51		120	35.1 - 175	
Sample ID	RunNo: 79337	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-003 PO	01/19/12 15:42	Polonium 210 (Suspended)	2	1	1.51		99.1	48.6 - 156	
Sample ID	RunNo: 79338	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-003	01/20/12 13:07	Lead 210 (Suspended)	14	1	12.8		107	60.3 - 141	

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

Sample ID	RunNo: 79023	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112370-001FMS	01/17/12 13:40	Lead 210 (Dissolved)	16	1	12.8	2	108	66 - 133	
Sample ID	RunNo: 79024	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112369-001FMS	01/16/12 16:35	Polonium 210 (Dissolved)	4	1	5.73	1	39.2	20.9 - 160	
Sample ID	RunNo: 79337	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112367-007FMS	01/19/12 17:09	Polonium 210 (Suspended)	5	1	5.73	ND	86.3	28 - 173	
Sample ID	RunNo: 79338	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112367-007FMS	01/20/12 15:19	Lead 210 (Suspended)	16	1	12.8	2	104	62.4 - 132	

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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Lead 210 and Polonium 210

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

Sample ID	RunNo:	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1112368-001FDUP 01/17/12 13:40 Lead 210 (Dissolved) 5 1 5 4.13 20

Sample ID	RunNo:	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1112368-001FDUP 01/16/12 16:35 Polonium 210 (Dissolved) ND 1 ND 20

Sample ID	RunNo:	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1112367-003FDUP 01/19/12 15:42 Polonium 210 (Suspended) ND 1 ND 20

Sample ID	RunNo:	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1112367-003FDUP 01/20/12 13:07 Lead 210 (Suspended) 4 1 3 19.1 20

Radium 228

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

Sample ID	RunNo:	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB12-012 01/17/12 17:58 Radium 228 (Dissolved) ND 1

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

Sample ID	RunNo:	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS12-012 01/17/12 17:58 Radium 228 (Dissolved) 9 1 9.91 94.3 74.9 - 122

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

Sample ID	RunNo:	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1112370-001FMS 01/17/12 17:58 Radium 228 (Dissolved) 11 1 9.91 2 93.8 48.4 - 167

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

Sample ID	RunNo:	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1112447-001FDUP 01/17/12 17:58 Radium 228 (Dissolved) 5 1 5 0.748 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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Radium 226 by SM 7500

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

Sample ID	RunNo: 78633	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-362	01/05/12 11:44	Radium 226 (Dissolved)	ND	0.2					

Sample ID	RunNo: 78737	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-003	01/10/12 9:27	Radium 226 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 78633	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-362	01/05/12 11:44	Radium 226 (Dissolved)	5.3	0.2	5.06		104	62.5 - 125	

Sample ID	RunNo: 78737	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-003	01/10/12 9:27	Radium 226 (Suspended)	5.3	0.2	5.06		104	56.4 - 132	

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

Sample ID	RunNo: 78633	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112371-002FMS	01/05/12 16:17	Radium 226 (Dissolved)	5.9	0.2	5.06	0.8	102	41.6 - 146	

Sample ID	RunNo: 78737	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112367-005FMS	01/10/12 11:57	Radium 226 (Suspended)	9.1	0.2	5.06	4.0	100	51.4 - 135	

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

Sample ID	RunNo: 78633	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112367-002FDUP	01/05/12 11:44	Radium 226 (Dissolved)	2.4	0.2	2.8	13.4		20	

Sample ID	RunNo: 78737	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112367-002FDUP	01/10/12 9:27	Radium 226 (Suspended)	ND	0.2	0.2			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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Thorium 230 in WaterSample Type **MBLK** Units: pCi/L

Sample ID	RunNo: 78688	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-353	01/05/12 9:13	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 78710	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-003	01/09/12 9:13	Thorium 230 (Dissolved)	ND	0.2					
		Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 78688	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-353	01/05/12 9:13	Thorium 230 (Dissolved)	13	0.2	12		101	67.1 - 134	

Sample ID	RunNo: 78710	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-003	01/09/12 9:13	Thorium 230 (Dissolved)	11	0.2	12		90.9	67.1 - 134	
		Thorium 230 (Suspended)	11	0.2	12		90.9	69.2 - 127	

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

Sample ID	RunNo: 78688	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112367-003FDUP	01/05/12 9:13	Thorium 230 (Dissolved)	ND	0.2	ND			20	

Sample ID	RunNo: 78710	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112371-001FDUP	01/10/12 8:12	Thorium 230 (Suspended)	ND	0.2	ND			20	

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

Sample ID	RunNo: 78738	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R78738	12/21/11 0:00	Radon-222	ND	50					L

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

Sample ID	RunNo: 78738	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R78738	12/21/11 0:00	Radon-222	22700	100	22500		101	75 - 125	L

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

Sample ID	RunNo: 78738	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112369-001A	12/21/11 0:00	Radon-222	2540000	50	2580000	1.55		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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Silica as SiO2

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

Sample ID	RunNo: 78252	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	12/23/11 8:43	Silica as SiO2	ND	0.1					

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

Sample ID	RunNo: 78252	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	12/23/11 8:46	Silica as SiO2	2.2	0.1	2.14		100	85 - 115	

Solids By SM 2540

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

Sample ID	RunNo: 78516	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	12/30/11 9:47	Total Dissolved Solids (180)	ND	10					

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

Sample ID	RunNo: 78516	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	12/30/11 9:48	Total Dissolved Solids (180)	220	10	226		99.1	90 - 110	

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

Sample ID	RunNo: 78516	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112389-003A	12/30/11 9:56	Total Dissolved Solids (180)	1060	10	1060	0.376		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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Total (200.2) Metals by EPA 200.7 ICP - Water

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

Sample ID	RunNo: 78298	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-5725	12/27/11 16:03	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 78298	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-5725	12/27/11 16:06	Iron	0.48	0.05	0.5		96.7	85 - 115	
		Manganese	0.19	0.02	0.2		96.4	85 - 115	

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

Sample ID	RunNo: 78298	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112422-001DS	12/27/11 16:10	Iron	3.06	0.05	0.5	2.59	94.1	70 - 130	
		Manganese	0.70	0.02	0.2	0.54	82.9	70 - 130	

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

Sample ID	RunNo: 78298	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1112422-001DMSD	12/27/11 16:13	Iron	3.11	0.05	3.06	1.51		20	
		Manganese	0.74	0.02	0.70	6.01		20	

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

Sample ID	RunNo: 78298	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112423-001DD	12/27/11 16:34	Iron	0.89	0.05	0.87	1.33		20	
		Manganese	0.02	0.02	0.02	0.909		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: S1112369
Project: Reno Creek Project

Date: 1/31/2012
Report ID: S1112369001

Suspended Natural Uranium

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

Sample ID	RunNo: 78402	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	12/29/11 14:06	Uranium Suspended	ND	0.0003					

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

Sample ID	RunNo: 78402	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	12/29/11 14:02	Uranium Suspended	0.0970	0.0003	0.1		97.0	85 - 115	

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

Sample ID	RunNo: 78402	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1112371-002FS	12/29/11 18:56	Uranium Suspended	0.982	0.0003	1.1	0.0005	89.2	70 - 130	

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

Sample ID	RunNo: 78402	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1112371-002FMSD	12/29/11 19:01	Uranium Suspended	1.03	0.0003	0.982	5.00		20	

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

Sample ID	RunNo: 78402	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112371-002FD	12/29/11 18:51	Uranium Suspended	0.0005	0.0003	0.0005	3.27		20	

pH Water

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

Sample ID	RunNo: 78272	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	12/24/11 17:55	pH	8.5	0.1	8.48		99.9	90 - 110	

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

Sample ID	RunNo: 78272	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1112368-001AD	12/24/11 18:47	pH	11.8	0.1	11.7	0.635		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. (307) 682-8945
 Sheridan, WY 82801 (307) 672-8946

- CHAIN OF CUSTODY RECORD -

This is a **LEGAL DOCUMENT**. All shaded fields must be completed. See reverse for instructions. #RC 08160

Client Name		Project Identification		Sampler (Signature/Printed)		Telephone #						
AUC LLC		Reno Creek Project		Jacqui Nickerson								
Report Address		Contact Name		ANALYSES / PARAMETERS		REMARKS						
pcavendor@auc-llc.com; tnickerson@treecorp.com; jehriver@treecorp.com		Thaci Nickerson		See Attached Table 1 (4, 14, Guide R, Radon 222)								
Invoice Address AUC LLC 900 Weener Ct. Ste 150 Casper WY 82401		Email tnickerson@treecorp.com		See Attached Table 2 (Air Particulate)								
		Phone 307-265-0696		See Attached Table 3 (Vegetation)								
		Purchase Order #		See Attached Table 4 (Sediment)								
		Quote #		See Attached Table 5 (Soil)								
		Matrix		See Attached Table 8 WYDES Discharge								
		# of Containers		See Attached Table 9 (Blanks)								
ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SAMPLE IDENTIFICATION	DATE	TIME	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
1												
2	20112369-001	12/20/11	1330	PZM2-003-111220 WT 13 X	12/20/11	1530	Jacqui Nickerson	12/20/11	1630	Allen O. McNeil	12/20/11	1630
3										Brennae Keating	12/20/11	11:30
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
LAB COMMENTS												
5.2												
SHIPPING INFO		MATRIX CODES		TURNAROUND TIMES		COMPLIANCE INFORMATION		ADDITIONAL REMARKS				
<input type="checkbox"/> UPS	Water	Water	SWT	<input checked="" type="checkbox"/> Check desired service	Compliance Monitoring?	Y/N						
<input type="checkbox"/> Fed Express	Soil	Soil	SL	<input type="checkbox"/> Standard turnaround	Program (SDWA, NPDES...)							
<input type="checkbox"/> US Mail	Solid	Solid	SD	<input type="checkbox"/> RUSH - 5 Working Days	PWSID / Permit #							
<input type="checkbox"/> Hand Carried	Trip Blank	Trip Blank	TB	<input type="checkbox"/> URGENT - < 2 Working Days	Chlorinated?	Y/N						
<input checked="" type="checkbox"/> Other	Other	Other	OT	Rush & Urgent Surcharges will be applied	Sample Disposal: Lab	X	Client					