



Wednesday, July 6, 2011

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

RE: Reno Creek Project
Orde

r No.: S1106054

Dear Phil Cavendor:

Inter-Mountain Laboratories received samples PZM6-003-110602 on June 3, 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: 7/6/2011

CLIENT: AUC LLC
Project: Reno Creek Project
Lab Order: S1106054

CASE NARRATIVE
Report ID: S1106054001

Sample PZM6-003-110602 was received on June 3, 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.

Per client, sample ID on COC is incorrect and requested correction from PZM6-002-110602 to PZM6-003-110602.

Per ALS: One of the two voa vials had headspace. They take their aliquots from the vials with the smallest air bubbles. One voa of PZM6-002-110602 had an air bubble < green pea size.

Qualifiers by sample

S1106054-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory

Qualifiers by sample

- S1106054-001 - Radiochemistry/Polonium 210 (Dissolved) - RPD outside accepted recovery limits
- S1106053-001 - Radiochemistry/Lead 210 (Suspended) - RPD outside accepted recovery limits
- LCS-R71107 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- MB-R71107 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- S1106054-001 - 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: S1106054-001
ClientSample ID: PZM6-003-110602
COC: RC 08275

Date Reported: 7/6/2011
Report ID: S1106054001

WorkOrder: S1106054
CollectionDate: 6/2/2011 12:00:00 PM
DateReceived: 6/3/2011 10:00:00 AM
FieldSampler: TN
Matrix: Water

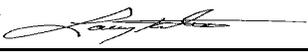
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Field						
pH Reading 1	10.94	s.u.			Field	6/2/2011 12:00:00 PM
pH Reading 2	11.22	s.u.			Field	6/2/2011 12:00:00 PM
pH Reading 3	11.24	s.u.			Field	6/2/2011 12:00:00 PM
Conductivity Reading 1	1173	µmhos/cm			Field	6/2/2011 12:00:00 PM
Conductivity Reading 2	1165	µmhos/cm			Field	6/2/2011 12:00:00 PM
Conductivity Reading 3	1164	µmhos/cm			Field	6/2/2011 12:00:00 PM
Turbidity Reading 1	3.6	NTU			Field	6/2/2011 12:00:00 PM
Turbidity Reading 2	2.2	NTU			Field	6/2/2011 12:00:00 PM
Turbidity Reading 3	2.3	NTU			Field	6/2/2011 12:00:00 PM
Dissolved Oxygen Reading 1	0.22	mg/L			Field	6/2/2011 12:00:00 PM
Dissolved Oxygen Reading 2	0.14	mg/L			Field	6/2/2011 12:00:00 PM
Dissolved Oxygen Reading 3	0.13	mg/L			Field	6/2/2011 12:00:00 PM
Temperature Reading 1	13.54	°C			Field	6/2/2011 12:00:00 PM
Temperature Reading 2	13.67	°C			Field	6/2/2011 12:00:00 PM
Temperature Reading 3	13.51	°C			Field	6/2/2011 12:00:00 PM
Oxygen Reduction Potential Reading	-248.8	mV			Field	6/2/2011 12:00:00 PM
Oxygen Reduction Potential Reading	-245.3	mV			Field	6/2/2011 12:00:00 PM
Oxygen Reduction Potential Reading	-242.2	mV			Field	6/2/2011 12:00:00 PM
Purge Rate Reading 1	300.0	ml/min			Field	6/2/2011 12:00:00 PM
Purge Rate Reading 2	300.0	ml/min			Field	6/2/2011 12:00:00 PM
Purge Rate Reading 3	300.0	ml/min			Field	6/2/2011 12:00:00 PM
Water Level Reading 1	198.60	Ft			Field	6/2/2011 12:00:00 PM
Water Level Reading 2	198.60	Ft			Field	6/2/2011 12:00:00 PM
Water Level Reading 3	198.59	Ft			Field	6/2/2011 12:00:00 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

Date Reported: 7/6/2011
Report ID: S1106054001

ProjectName: Reno Creek Project
Lab ID: S1106054-001
ClientSample ID: PZM6-003-110602
COC: RC 08275

WorkOrder: S1106054
CollectionDate: 6/2/2011 12:00:00 PM
DateReceived: 6/3/2011 10:00:00 AM
FieldSampler: TN
Matrix: Water

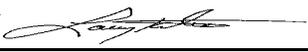
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Anions/Cations							
Alkalinity, Total (As CaCO3)	192	mg/L		5	SM 2320B	6/3/2011 7:18:44 PM	KO
Alkalinity, Bicarbonate as HCO3	209	mg/L		5	SM 2320B	6/3/2011 7:18:44 PM	KO
Alkalinity, Carbonate as CO3	13	mg/L		5	SM 2320B	6/3/2011 7:18:44 PM	KO
Chloride	8	mg/L		1	EPA 300.0	6/6/2011 4:49:00 PM	KO
Fluoride	0.4	mg/L		0.1	SM 4500FC	6/3/2011 7:18:44 PM	KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	6/10/2011 4:47:00 PM	MEL
Sulfate	375	mg/L		1	EPA 300.0	6/6/2011 4:46:00 PM	KO
Calcium	72	mg/L		1	EPA 200.7	6/6/2011 11:16:39 AM	DG
Magnesium	12	mg/L		1	EPA 200.7	6/6/2011 11:16:39 AM	DG
Potassium	7	mg/L		1	EPA 200.7	6/9/2011 4:01:48 PM	DG
Sodium	193	mg/L		1	EPA 200.7	6/9/2011 4:01:48 PM	DG
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	6/8/2011 5:01:00 PM	MEL
Silica as SiO2	13	mg/L		1	EPA 200.7	6/6/2011 11:16:39 AM	DG
General Parameters							
pH	8.7	s.u.		0.1	SM 4500 H B	6/3/2011 7:18:44 PM	KO
Electrical Conductivity	1030	µmhos/cm		5	SM 2510B	6/3/2011 7:18:44 PM	KO
Total Dissolved Solids (180)	890	mg/L		10	SM 2540	6/15/2011 8:30:00 AM	JF
Data Quality							
Cation Sum	13.15	meq/L		0.01	SM 1030E	6/17/2011 11:33:06 AM	LJK
Anion Sum	11.91	meq/L		0.01	SM 1030E	6/17/2011 11:33:06 AM	LJK
Cation-Anion Balance (± 5%)	4.95	%		0.01	SM 1030E	6/17/2011 11:33:06 AM	LJK
Solids, Total Dissolved (Calc)	780	mg/L		10	SM 1030E	6/17/2011 11:33:06 AM	LJK
Calculated TDS/TDS Ratio (0.80-1.20)	1.14	dec. %		0.01	Calculation	6/17/2011 11:40:34 AM	LJK

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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: S1106054-001
ClientSample ID: PZM6-003-110602
COC: RC 08275

Date Reported: 7/6/2011
Report ID: S1106054001
WorkOrder: S1106054
CollectionDate: 6/2/2011 12:00:00 PM
DateReceived: 6/3/2011 10:00:00 AM
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: S1106054-001
ClientSample ID: PZM6-003-110602
COC: RC 08275

Date Reported: 7/6/2011
Report ID: S1106054001

WorkOrder: S1106054
CollectionDate: 6/2/2011 12:00:00 PM
DateReceived: 6/3/2011 10:00:00 AM
FieldSampler: TN
Matrix: Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Dissolved							
Gross Alpha	71.1	pCi/L		2	SM 7110B	6/22/2011 7:29:42 PM	SH
Gross Alpha Precision (±)	4.5	pCi/L			SM 7110B	6/22/2011 7:29:42 PM	SH
Gross Beta	33.0	pCi/L		4	SM 7110B	6/22/2011 7:29:42 PM	SH
Gross Beta Precision (±)	2.8	pCi/L			SM 7110B	6/22/2011 7:29:42 PM	SH
Lead 210	7.8	pCi/L		1	OTW01	6/19/2011 5:40:19 PM	SH
Lead 210 Precision (±)	0.7	pCi/L			OTW01	6/19/2011 5:40:19 PM	SH
Polonium 210	2.2	pCi/L		1	OTW01	6/20/2011 9:52:19 AM	SH
Polonium 210 Precision (±)	1.0	pCi/L			OTW01	6/20/2011 9:52:19 AM	SH
Radium 226	21.4	pCi/L		0.2	SM 7500-Ra B	6/15/2011 9:26:00 AM	SH
Radium 226 Precision (±)	0.5	pCi/L			SM 7500-Ra B	6/15/2011 9:26:00 AM	SH
Radium 228	1.4	pCi/L		1	Ra-05	6/27/2011 4:26:00 PM	SH
Radium 228 Precision (±)	1.4	pCi/L			Ra-05	6/27/2011 4:26:00 PM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/16/2011 9:17:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/16/2011 9:17:00 AM	SH
Radionuclides - Suspended							
Lead 210	6.9	pCi/L		1	OTW01	6/21/2011 7:08:50 PM	SH
Lead 210 Precision (±)	0.6	pCi/L			OTW01	6/21/2011 7:08:50 PM	SH
Polonium 210	ND	pCi/L		1	OTW01	6/21/2011 5:51:05 PM	SH
Polonium 210 Precision (±)	NA	pCi/L			OTW01	6/21/2011 5:51:05 PM	SH
Radium 226	ND	pCi/L		0.2	SM 7500-Ra B	6/9/2011 11:36:54 AM	SH
Radium 226 Precision (±)	NA	pCi/L			SM 7500-Ra B	6/9/2011 11:36:54 AM	SH
Thorium 230	ND	pCi/L		0.2	ACW10	6/20/2011 8:09:00 AM	SH
Thorium 230 Precision (±)	NA	pCi/L			ACW10	6/20/2011 8:09:00 AM	SH
Radionuclides - Total							
Radon 222	2240	pCi/L	L	50	SM7500-RN	6/3/2011	LJK
Radon 222 Precision (±)	260	pCi/L	L		SM7500-RN	6/3/2011	LJK

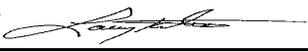
These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

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- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: 
 Lacey Ketron, Water Lab Supervisor



ANALYTICAL QC SUMMARY REPORT

CLIENT: AUC LLC
Work Order: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Alkalinity

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	06/03/11 16:05	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	06/03/11 15:58	Alkalinity, Total (As CaCO3)	593	5	607		97.7	90 - 110	

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106054-001B	06/03/11 19:28	Alkalinity, Bicarbonate as HCO3	209	5	209	0.123		20	
		Alkalinity, Carbonate as CO3	11	5	13	9.92		20	
		Alkalinity, Total (As CaCO3)	190	5	192	1.19		20	

Conductivity

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	06/03/11 16:05	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	06/03/11 15:58	Electrical Conductivity	962	5	1000		96.1	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 70754	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106054-001B	06/03/11 19:28	Electrical Conductivity	1030	5	1030	0.0968		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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Dissolved Mercury by EPA 245.1 - Water

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

Sample ID	RunNo: 70801	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	06/07/11 10:10	Mercury	ND	0.001					

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

Sample ID	RunNo: 70801	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	06/07/11 10:08	Mercury	0.002	0.001	0.002		103	85 - 115	

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

Sample ID	RunNo: 70801	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106045-009B	06/07/11 14:14	Mercury	0.0025	0.0001	0.00244	ND	102	70 - 130	

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

Sample ID	RunNo: 70801	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106045-009B	06/07/11 14:16	Mercury	0.0023	0.0001	0.0025	7.60	94.0	20	

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

Sample ID	RunNo: 70801	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106045-009B	06/07/11 14:12	Mercury	ND	0.0001	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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 70778	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	06/06/11 10:39	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: 70778	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	06/06/11 10:41	Aluminum	1.0	0.1	1		101	85 - 115	
		Boron	1.0	0.1	1		98.6	85 - 115	
		Chromium	1.02	0.01	1		102	85 - 115	
		Iron	1.02	0.05	1		102	85 - 115	
		Manganese	1.04	0.02	1		104	85 - 115	
		Nickel	1.02	0.01	1		102	85 - 115	
		Zinc	1.00	0.01	1		100	85 - 115	

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

Sample ID	RunNo: 70778	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106071-004CS	06/06/11 12:14	Aluminum	0.5	0.1	0.5	ND	109	70 - 130	
		Boron	0.6	0.1	0.5	0.1	100	70 - 130	
		Chromium	0.51	0.01	0.5	ND	102	70 - 130	
		Iron	0.54	0.05	0.5	ND	101	70 - 130	
		Manganese	0.59	0.02	0.5	0.08	102	70 - 130	
		Nickel	0.50	0.01	0.5	ND	99.9	70 - 130	
		Zinc	0.50	0.01	0.5	ND	101	70 - 130	

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

Sample ID	RunNo: 70778	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106071-004CSD	06/06/11 12:16	Aluminum	0.6	0.1	0.5	0.603	110	20	
		Boron	0.6	0.1	0.6	0.788	101	20	
		Chromium	0.52	0.01	0.51	1.32	103	20	
		Iron	0.54	0.05	0.54	0.596	102	20	
		Manganese	0.59	0.02	0.59	0.682	103	20	
		Nickel	0.50	0.01	0.50	0.981	101	20	
		Zinc	0.51	0.01	0.50	0.776	101	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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Dissolved Metals by ICP - EPA 200.7 - Water

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

Sample ID	RunNo: 70778	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106071-003CD	06/06/11 12:09	Aluminum	ND	0.1	ND			20	
		Boron	ND	0.1	ND			20	
		Chromium	ND	0.01	ND			20	
		Iron	ND	0.05	ND			20	
		Manganese	0.02	0.02	0.02	0.412		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: 70745	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	06/03/11 16:03	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: 70745	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	06/03/11 15:59	Arsenic	0.098	0.005	0.1		98.1	85 - 115	
		Barium	ND	0.5	0.1		102	85 - 115	
		Cadmium	0.100	0.002	0.1		99.7	85 - 115	
		Copper	0.10	0.01	0.1		97.0	85 - 115	
		Lead	0.10	0.02	0.1		98.7	85 - 115	
		Molybdenum	0.10	0.02	0.1		96.6	85 - 115	
		Selenium	0.099	0.005	0.1		99.3	85 - 115	
		Uranium	0.099	0.001	0.1		98.5	85 - 115	
		Vanadium	0.10	0.02	0.1		96.3	85 - 115	

- Qualifiers:**
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 - H Holding times for preparation or analysis exceeded
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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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 70745	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106061-002CS	06/03/11 19:11	Arsenic	1.21	0.005	1.1	ND	110	70 - 130	
		Barium	1.3	0.5	1.1	ND	117	70 - 130	
		Cadmium	1.25	0.002	1.1	ND	114	70 - 130	
		Copper	1.23	0.01	1.1	ND	111	70 - 130	
		Lead	1.27	0.02	1.1	ND	115	70 - 130	
		Molybdenum	1.19	0.02	1.1	ND	108	70 - 130	
		Selenium	1.21	0.005	1.1	ND	110	70 - 130	
		Uranium	1.25	0.001	1.1	ND	114	70 - 130	
		Vanadium	1.21	0.02	1.1	ND	110	70 - 130	

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

Sample ID	RunNo: 70745	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106061-002CMSD	06/03/11 19:15	Arsenic	1.24	0.005	1.21	2.87	113	20	
		Barium	1.3	0.5	1.3	3.09	121	20	
		Cadmium	1.29	0.002	1.25	2.94	117	20	
		Copper	1.26	0.01	1.23	2.68	114	20	
		Lead	1.29	0.02	1.27	1.81	117	20	
		Molybdenum	1.22	0.02	1.19	2.60	111	20	
		Selenium	1.25	0.005	1.21	3.16	114	20	
		Uranium	1.30	0.001	1.25	3.54	118	20	
		Vanadium	1.24	0.02	1.21	3.04	113	20	

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

Sample ID	RunNo: 70745	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106061-002CD	06/03/11 19:07	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
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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	06/03/11 16:05	Fluoride	ND	0.1					

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	06/03/11 15:58	Fluoride	2.6	0.1	2.71		96.6	90 - 110	

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106059-001ASPK	06/03/11 20:26	Fluoride	2.6	0.1	2.5	ND	100	80 - 120	

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106054-001B	06/03/11 19:28	Fluoride	0.4	0.1	0.4	3.11		20	

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

Sample ID	RunNo: 71282	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-170	06/20/11 10:27	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 71282	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-170	06/20/11 10:27	Gross Alpha (Dissolved)	82	2	73.6		111	76.7 - 133	
		Gross Beta (Dissolved)	139	3	126		110	76.7 - 133	

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

Sample ID	RunNo: 71282	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106053-001GMS	06/20/11 10:27	Gross Alpha (Dissolved)	67	2	73.6	ND	91.3	47.8 - 153	
		Gross Beta (Dissolved)	147	3	126	ND	117	47.8 - 153	

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

Sample ID	RunNo: 71282	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106022-001GDUP	06/20/11 10:27	Gross Alpha (Dissolved)	73	2	72	1.16		20	
		Gross Beta (Dissolved)	22	4	19	18.4		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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Anions by ION Chromatography

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

Sample ID	RunNo: 70782	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	06/06/11 12:28	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 70782	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	06/06/11 12:39	Chloride	30	1	30		101	90 - 110	
		Sulfate	144	1	150		96.3	90 - 110	

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

Sample ID	RunNo: 70782	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106083-002ASPK	06/06/11 18:01	Chloride	259	1	130	139	92.5	80 - 120	
		Sulfate	1910	1	1040	900	97.2	80 - 120	

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

Sample ID	RunNo: 70782	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106083-002A	06/06/11 17:49	Chloride	135	1	139	3.04		20	
		Sulfate	876	1	900	2.65		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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 70777	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	06/06/11 10:39	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample ID	RunNo: 70906	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	06/09/11 10:43	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 70777	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	06/06/11 10:43	Calcium	41	1	40		103	85 - 115	
		Magnesium	40	1	40		98.8	85 - 115	
		Potassium	41	1	40		102	85 - 115	
		Sodium	41	1	40		102	85 - 115	

Sample ID	RunNo: 70906	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	06/09/11 10:47	Calcium	40	1	40		100	85 - 115	
		Magnesium	40	1	40		99.0	85 - 115	
		Potassium	41	1	40		102	85 - 115	
		Sodium	41	1	40		101	85 - 115	

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

Sample ID	RunNo: 70777	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106065-002AS	06/06/11 11:44	Calcium	62	1	25	42	81.1	70 - 130	
		Magnesium	45	1	25	23	86.3	70 - 130	
		Potassium	29	1	25	3	104	70 - 130	
		Sodium	40	1	25	17	92.3	70 - 130	

Sample ID	RunNo: 70906	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106182-005AS	06/09/11 17:08	Calcium	68	1	25	45	91.8	70 - 130	
		Magnesium	53	1	25	28	102	70 - 130	
		Potassium	32	1	25	3	114	70 - 130	
		Sodium	42	1	25	14	110	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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 70777	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106065-002ASD	06/06/11 11:46	Calcium	64	1	62	1.75	85.5	20	
		Magnesium	46	1	45	2.48	90.7	20	
		Potassium	30	1	29	4.08	109	20	
		Sodium	41	1	40	2.80	96.8	20	

Sample ID	RunNo: 70906	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106182-005ASD	06/09/11 17:10	Calcium	69	1	68	0.707	93.8	20	
		Magnesium	54	1	53	2.10	107	20	
		Potassium	34	1	32	6.43	122	20	
		Sodium	44	1	42	4.10	117	20	

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

Sample ID	RunNo: 70777	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106065-001AD	06/06/11 11:39	Calcium	33	1	33	0.135		20	
		Magnesium	15	1	15	0.218		20	
		Potassium	2	1	2	0.607		20	
		Sodium	10	1	10	0.292		20	

Sample ID	RunNo: 70906	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106182-004AD	06/09/11 17:03	Calcium	40	1	44	7.99		20	
		Magnesium	19	1	21	8.70		20	
		Potassium	4	1	4	7.04		20	
		Sodium	17	1	18	2.65		20	

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

Sample ID	RunNo: 70880	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	06/08/11 15:18	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 70880	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	06/08/11 15:20	Nitrogen, Ammonia (As N)	9.6	0.1	8.93		108	90 - 110	

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

Sample ID	RunNo: 70880	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106089-001D	06/08/11 17:05	Nitrogen, Ammonia (As N)	10.2	0.1	10	0.4	98.2	80 - 120	

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

Sample ID	RunNo: 70880	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106089-001D	06/08/11 17:04	Nitrogen, Ammonia (As N)	0.4	0.1	0.4	2.36		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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Nitrogen, Nitrate-Nitrite (as N)

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

Sample ID	RunNo: 70960	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	06/10/11 14:39	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 70960	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	06/10/11 14:41	Nitrogen, Nitrate-Nitrite (as N)	7.4	0.1	7.69		95.6	90 - 110	

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

Sample ID	RunNo: 70960	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106107-006B	06/10/11 16:33	Nitrogen, Nitrate-Nitrite (as N)	9.3	0.1	10	ND	92.5	80 - 120	

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

Sample ID	RunNo: 70960	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106107-006B	06/10/11 16:32	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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 71351	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-158	06/19/11 0:00	Lead 210 (Dissolved)	ND	1					
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Sample ID	RunNo: 71406	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-158	06/20/11 9:52	Polonium 210 (Dissolved)	ND	1					
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Sample ID	RunNo: 71417	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-160	06/21/11 19:08	Lead 210 (Suspended)	ND	1					
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Sample ID	RunNo: 71418	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-160	06/21/11 17:51	Polonium 210 (Suspended)	ND	1					
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Sample Type **LCS** Units: pCi/L

Sample ID	RunNo: 71351	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-158	06/19/11 17:40	Lead 210 (Dissolved)	14	1	13		105	67.6 - 131	
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Sample ID	RunNo: 71406	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-158	06/20/11 9:52	Polonium 210 (Dissolved)	16	1	13		123	67.6 - 131	
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Sample ID	RunNo: 71417	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-160	06/21/11 19:08	Lead 210 (Suspended)	14	1	13		111	67.6 - 131	
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Sample ID	RunNo: 71418	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-160	06/21/11 17:51	Polonium 210 (Suspended)	9	1	13		70.6	67.6 - 131	
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Sample Type **MS** Units: pCi/L

Sample ID	RunNo: 71351	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1106022-001GMS	06/19/11 17:40	Lead 210 (Dissolved)	15	1	13	2	102	66 - 133	
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Sample ID	RunNo: 71406	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1106021-001GMS	06/20/11 9:52	Polonium 210 (Dissolved)	12	1	13	ND	91.1	66 - 133	
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Sample ID	RunNo: 71417	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1106022-001GMS	06/21/11 19:08	Lead 210 (Suspended)	20	1	13	7	101	66 - 133	
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Sample ID	RunNo: 71418	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1106022-001GMS	06/21/11 17:51	Polonium 210 (Suspended)	8	1	13	1	48.7	66 - 133	
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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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Lead 210 and Polonium 210

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

Sample ID	RunNo: 71351	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1106054-001GDUP 06/19/11 17:40 Lead 210 (Dissolved) 8 1 8 0.513 20

Sample ID	RunNo: 71406	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1106054-001GDUP 06/20/11 9:52 Polonium 210 (Dissolved) 4 1 2 67.3 20 R

Sample ID	RunNo: 71417	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1106053-001GDUP 06/21/11 19:08 Lead 210 (Suspended) 1 1 ND 20

Sample ID	RunNo: 71418	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1106053-001GDUP 06/21/11 17:51 Polonium 210 (Suspended) ND 1 ND 20

Radium 228

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

Sample ID	RunNo: 71545	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-173 06/27/11 16:26 Radium 228 (Dissolved) ND 1

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

Sample ID	RunNo: 71545	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-173 06/27/11 16:26 Radium 228 (Dissolved) 11 1 10.3 106 75 - 122

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

Sample ID	RunNo: 71545	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1106053-001GMS 06/27/11 16:26 Radium 228 (Dissolved) 12 1 10.3 ND 112 48 - 167

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

Sample ID	RunNo: 71545	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1106054-001GDUP 06/27/11 14:25 Radium 228 (Dissolved) 2 1 1 10.8 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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Radium 226 by SM 7500

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

Sample ID	RunNo: 70893	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DMB11-158	06/09/11 11:36	Radium 226 (Suspended)	ND	0.2					

Sample ID	RunNo: 71096	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-157	06/15/11 9:26	Radium 226 (Dissolved)	ND	0.2					

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

Sample ID	RunNo: 70893	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-158	06/09/11 11:36	Radium 226 (Suspended)	5.0	0.2	5		99.2	56.4 - 132	

Sample ID	RunNo: 71096	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-157	06/15/11 9:26	Radium 226 (Dissolved)	5.1	0.2	5		101	56.4 - 132	

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

Sample ID	RunNo: 71096	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1105386-002AMS	06/15/11 9:26	Radium 226 (Suspended)	4.5	0.2	5	0.3	83.5	51 - 135	

Sample ID	RunNo: 70893	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106061-001DMS	06/09/11 11:36	Radium 226 (Dissolved)	5.0	0.2	5	ND	99.4	51 - 135	

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

Sample ID	RunNo: 71096	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105388-002ADUP	06/15/11 9:26	Radium 226 (Suspended)	0.3	0.2	0.3	9.82		20	

Sample ID	RunNo: 70893	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106067-001DDUP	06/09/11 11:36	Radium 226 (Dissolved)	0.3	0.2	0.2	12.7		20	

- Qualifiers:**
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 - 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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 71146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-158	06/15/11 9:14	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 71304	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-157	06/17/11 9:01	Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 71146	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-158	06/15/11 9:14	Thorium 230 (Dissolved)	12	0.2	12		96.0	67 - 134	

Sample ID	RunNo: 71304	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-157	06/17/11 9:01	Thorium 230 (Suspended)	12	0.2	12		99.4	67 - 134	

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

Sample ID	RunNo: 71146	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106055-001GDUP	06/15/11 13:19	Thorium 230 (Dissolved)	ND	0.2	ND			20	

Sample ID	RunNo: 71304	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1105444-001FDUP	06/17/11 9:01	Thorium 230 (Suspended)	ND	0.2	ND			20	

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

Sample ID	RunNo: 71107	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R71107	06/03/11 0:00	Radon-222	ND	50					L

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

Sample ID	RunNo: 71107	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R71107	06/03/11 0:00	Radon-222	21900	100	22500		97.3	75 - 125	L

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

Sample ID	RunNo: 71107	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106054-001B	06/03/11 0:00	Radon-222	2190	50	2240	2.23		20	L

Silica as SiO2Sample Type **MBLK** Units: mg/L

Sample ID	RunNo: 70779	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	06/06/11 10:39	Silica as SiO2	ND	0.1					

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

Sample ID	RunNo: 70779	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	06/06/11 10:41	Silica as SiO2	2.2	0.1	2.14		101	85 - 115	

Qualifiers:

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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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

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

Sample ID	RunNo: 71172	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	06/15/11 7:10	Total Dissolved Solids (180)	ND	10					

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

Sample ID	RunNo: 71172	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CONTROL	06/15/11 7:15	Total Dissolved Solids (180)	220	10	226		96.5	90 - 110	

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

Sample ID	RunNo: 71172	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106067-003A	06/06/11 9:10	Total Dissolved Solids (180)	2570	10	2550	0.784		20	

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

Sample ID	RunNo: 70812	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK 6/6 TOT -5182	06/07/11 16:05	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 70812	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS 6/6 TOT -5182	06/07/11 16:08	Iron	0.47	0.05	0.5		94.3	85 - 115	
		Manganese	0.19	0.02	0.2		93.3	85 - 115	

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

Sample ID	RunNo: 70812	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106022-001FS	06/07/11 16:17	Iron	0.59	0.05	0.5	0.14	89.7	70 - 130	
		Manganese	0.26	0.02	0.2	0.07	90.4	70 - 130	

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

Sample ID	RunNo: 70812	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106022-001FSD	06/07/11 16:19	Iron	0.59	0.05	0.59	0.357	90.2	20	
		Manganese	0.26	0.02	0.26	0.707	91.3	20	

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

Sample ID	RunNo: 70812	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106021-001FD	06/07/11 16:12	Iron	0.05	0.05	0.05	3.01		20	
		Manganese	0.07	0.02	0.08	1.46		20	

Qualifiers:

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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: S1106054
Project: Reno Creek Project

Date: 7/6/2011
Report ID: S1106054001

Suspended Natural Uranium

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

Sample ID	RunNo: 70796	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	06/07/11 9:44	Uranium Suspended	ND	0.0003					

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

Sample ID	RunNo: 70796	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	06/07/11 9:42	Uranium Suspended	0.105	0.0003	0.1		105	85 - 115	

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

Sample ID	RunNo: 70796	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1106021-001HS	06/07/11 9:58	Uranium Suspended	1.18	0.0003	1.1	ND	107	70 - 130	

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

Sample ID	RunNo: 70796	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1106021-001HMSD	06/07/11 10:00	Uranium Suspended	1.21	0.0003	1.18	2.85	110	20	

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

Sample ID	RunNo: 70796	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106021-001HD	06/07/11 9:55	Uranium Suspended	ND	0.0003	ND			20	

pH Water

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	06/03/11 15:58	pH	8.4	0.1	8.63		97.6	90 - 110	

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

Sample ID	RunNo: 70754	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1106054-001B	06/03/11 19:28	pH	8.6	0.1	8.7	0.275		20	

- Qualifiers:**
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 - L Analyzed by a contract laboratory
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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



Inter-Mountain Labs
 Sheridan, WY and Gillette, WY
 1673 Terra Ave
 Sheridan, WY 82801 (307) 682-8845
 INTER-MOUNTAIN LABS (307) 672-9945

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- CHAIN OF CUSTODY RECORD -

Client Name AUC LLC		Report Address pcavendor@auc-llc.com; mickerson@treccorp.com; jshriver@treccorp.com		Project Identification Reno Creek Project		Sampler (Signature/Printed) <i>Tracey Nickerson</i>		Telephone #								
Invoice Address AUC LLC 951 Cassper Ct. 574 395 Casper WY 82601		Contact Name <i>Tracey Nickerson</i>		Email <i>mnickerson@treccorp.com</i>		Purchase Order # <i>307-265-0696</i>		Quote #								
ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME	SAMPLE IDENTIFICATION	Matrix	# of Containers	See Attached Table 1 (4,14, Guide F, 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 WYPDES Discharge	See Attached Table 9 (Blanks)	REMARKS		
1																
2	S1106054-001	4/2/11	12:00	P2ME-002-110602	U3	13	X							Roundwater		
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
LAB COMMENTS		Relinquished By (Signature/Printed)		DATE		TIME		Received By (Signature/Printed)		DATE		TIME				
		<i>Tracey Nickerson</i>		4/2/11		1530		<i>Shirley Q. Brist</i>		6/3/11		1000				
SHIPPING INFO		MATRIX CODES		TURNAROUND TIMES		COMPLIANCE INFORMATION		ADDITIONAL REMARKS								
<input type="checkbox"/> UPS <input type="checkbox"/> Fed Express <input type="checkbox"/> US Mail <input type="checkbox"/> Hand Carried <input checked="" type="checkbox"/> Other		Water WT Soil SL Solid SD Trip Blank TB Other OT		<input type="checkbox"/> Check desired service <input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH - 5 Working Days <input type="checkbox"/> URGENT - < 2 Working Days Rush & Urgent Surcharges will be applied		<input type="checkbox"/> Compliance Monitoring? Program (SDWA, NPDES,...) PWSID / Permit # Chlorinated? Sample Disposal: Lab		<input checked="" type="checkbox"/> Y / <input checked="" type="checkbox"/> N <input type="checkbox"/> Y / <input type="checkbox"/> N <input type="checkbox"/> Y / <input type="checkbox"/> N								