



Thursday, July 07, 2011

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

RE: Reno Creek Project  
Orde

r No.: S1103348

Dear Phil Cavendor:

Inter-Mountain Laboratories received samples PZM18-002-110322, and PZM6-002-110322 on March 22, 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: 7/7/2011

**CLIENT:** AUC LLC  
**Project:** Reno Creek Project  
**Lab Order:** S1103348

**CASE NARRATIVE**  
**Report ID:** S1103348002  
(Replaces S1103348001)

Samples PZM18-002-110322, and PZM6-002-110322 were received on March 22, 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

- S1103348-001 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- S1103348-002 - General Parameters/Radon-222 - Analyzed by a contract laboratory

Qualifiers by sample

- S1103324-002 - Radiochemistry/Radium 226 (Dissolved) - RPD outside accepted recovery limits
- S1103348-002 - Cations/Sodium - Spike Recovery outside accepted recovery limits (1)
- S1103348-002 - Cations/Sodium - Spike Recovery outside accepted recovery limits (1)
- MB-R68894 - General Parameters/Radon-222 - Analyzed by a contract laboratory
- LCS-R68894 - General Parameters/Radon-222 - Analyzed by a contract laboratory

(1) Spike recovery outside acceptance criteria due to presence of analyte in the sample that greatly exceeded level of spike used. Data approved because all other QC were within acceptance limits.

Reviewed by:

Lacey Ketron, Water Lab Supervisor



Sample Analysis Report

Company: AUC LLC
1536 Cole Blvd
Lakewood, CO 80401
ProjectName: Reno Creek Project
Lab ID: S1103348-001
ClientSample ID: PZM18-002-110322
COC: RC 08015

Date Reported 7/7/2011
Report ID S1103348002
(Replaces S1103348001)
WorkOrder: S1103348
CollectionDate: 3/22/2011 12:35:00 PM
DateReceived: 3/22/2011 5:30:00 PM
FieldSampler: JS
Matrix: Water

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include pH Reading, Conductivity Reading, Turbidity Reading, Dissolved Oxygen Reading, Temperature Reading, Oxygen Reduction Potential Reading, Purge Rate Reading, and Water Level Reading.

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:** S1103348-001  
**ClientSample ID:** PZM18-002-110322  
**COC:** RC 08015

**Date Reported:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**WorkOrder:** S1103348  
**CollectionDate:** 3/22/2011 12:35:00 PM  
**DateReceived:** 3/22/2011 5:30:00 PM  
**FieldSampler:** JS  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	48	mg/L		5	SM 2320B	3/24/2011 3:26:17 PM	KO
Alkalinity, Bicarbonate as HCO3	ND	mg/L		5	SM 2320B	3/24/2011 3:26:17 PM	KO
Alkalinity, Carbonate as CO3	26	mg/L		5	SM 2320B	3/24/2011 3:26:17 PM	KO
Chloride	4	mg/L		1	EPA 300.0	3/25/2011 10:42:00 AM	KO
Fluoride	0.1	mg/L		0.1	SM 4500FC	3/24/2011 3:26:17 PM	KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	3/30/2011 11:20:00 AM	AS
Sulfate	480	mg/L		1	EPA 300.0	3/25/2011 10:42:00 AM	KO
Calcium	80	mg/L		1	EPA 200.7	3/24/2011 2:59:00 PM	DG
Magnesium	5	mg/L		1	EPA 200.7	3/24/2011 2:59:00 PM	DG
Potassium	13	mg/L		1	EPA 200.7	3/24/2011 2:59:00 PM	DG
Sodium	170	mg/L		1	EPA 200.7	3/24/2011 2:59:00 PM	DG
Nitrogen, Ammonia (As N)	0.5	mg/L		0.1	EPA 350.1	3/29/2011 10:59:00 AM	AS
Silica as SiO2	5	mg/L		1	EPA 200.7	3/24/2011 2:59:00 PM	DG
<b>General Parameters</b>							
pH	10.6	s.u.		0.1	SM 4500 H B	3/24/2011 3:26:17 PM	KO
Electrical Conductivity	1110	µmhos/cm		5	SM 2510B	3/24/2011 3:26:17 PM	KO
Total Dissolved Solids (180)	860	mg/L		10	SM 2540	3/23/2011 4:00:00 PM	AMB
<b>Data Quality</b>							
Cation Sum	12.12	meq/L		0.00	SM 1030E	4/8/2011 4:13:56 PM	LJK
Anion Sum	11.15	meq/L		0.00	SM 1030E	4/8/2011 4:13:56 PM	LJK
Cation-Anion Balance (± 5%)	4.14	%		0.00	SM 1030E	4/8/2011 4:13:56 PM	LJK
Solids, Total Dissolved (Calc)	780	mg/L		10	SM 1030E	4/8/2011 4:13:56 PM	LJK
Calculated TDS/TDS Ratio (0.80-1.20)	1.10	dec. %		0.01	Calculation	4/8/2011 4:15:16 PM	LJK

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
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- L Analyzed by a contract laboratory
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- 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: S1103348-001
ClientSample ID: PZM18-002-110322
COC: RC 08015

Date Reported 7/7/2011
Report ID S1103348002
(Replaces S1103348001)
WorkOrder: S1103348
CollectionDate: 3/22/2011 12:35:00 PM
DateReceived: 3/22/2011 5:30:00 PM
FieldSampler: JS
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) and Metals - Suspended (Uranium) and Metals - Total (Iron, Manganese).

These results apply only to the samples tested.

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



Sample Analysis Report

Company: AUC LLC
1536 Cole Blvd
Lakewood, CO 80401
ProjectName: Reno Creek Project
Lab ID: S1103348-001
ClientSample ID: PZM18-002-110322
COC: RC 08015

Date Reported 7/7/2011
Report ID S1103348002
(Replaces S1103348001)
WorkOrder: S1103348
CollectionDate: 3/22/2011 12:35:00 PM
DateReceived: 3/22/2011 5:30:00 PM
FieldSampler: JS
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

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C Calculated Value
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O Outside the Range of Dilutions

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



### Sample Analysis Report

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

**Date Reported:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**ProjectName:** Reno Creek Project  
**Lab ID:** S1103348-002  
**ClientSample ID:** PZM6-002-110322  
**COC:** RC 08015

**WorkOrder:** S1103348  
**CollectionDate:** 3/22/2011 2:30:00 PM  
**DateReceived:** 3/22/2011 5:30:00 PM  
**FieldSampler:** JS  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
<b>Field</b>						
pH Reading 1	7.76	s.u.			Field	3/22/2011 2:30:00 PM
pH Reading 2	7.77	s.u.			Field	3/22/2011 2:30:00 PM
pH Reading 3	7.80	s.u.			Field	3/22/2011 2:30:00 PM
Conductivity Reading 1	917	µmhos/cm			Field	3/22/2011 2:30:00 PM
Conductivity Reading 2	917	µmhos/cm			Field	3/22/2011 2:30:00 PM
Conductivity Reading 3	910	µmhos/cm			Field	3/22/2011 2:30:00 PM
Turbidity Reading 1	1.3	NTU			Field	3/22/2011 2:30:00 PM
Turbidity Reading 2	1.0	NTU			Field	3/22/2011 2:30:00 PM
Turbidity Reading 3	1.7	NTU			Field	3/22/2011 2:30:00 PM
Dissolved Oxygen Reading 1	2.50	mg/L			Field	3/22/2011 2:30:00 PM
Dissolved Oxygen Reading 2	2.39	mg/L			Field	3/22/2011 2:30:00 PM
Dissolved Oxygen Reading 3	2.33	mg/L			Field	3/22/2011 2:30:00 PM
Temperature Reading 1	10.27	°C			Field	3/22/2011 2:30:00 PM
Temperature Reading 2	10.32	°C			Field	3/22/2011 2:30:00 PM
Temperature Reading 3	10.09	°C			Field	3/22/2011 2:30:00 PM
Oxygen Reduction Potential Reading	-162.4	mV			Field	3/22/2011 2:30:00 PM
Oxygen Reduction Potential Reading	-171.6	mV			Field	3/22/2011 2:30:00 PM
Oxygen Reduction Potential Reading	-178.9	mV			Field	3/22/2011 2:30:00 PM
Purge Rate Reading 1	150	ml/min			Field	3/22/2011 2:30:00 PM
Purge Rate Reading 2	150	ml/min			Field	3/22/2011 2:30:00 PM
Purge Rate Reading 3	150	ml/min			Field	3/22/2011 2:30:00 PM
Water Level Reading 1	198.41	Ft			Field	3/22/2011 2:30:00 PM
Water Level Reading 2	198.43	Ft			Field	3/22/2011 2:30:00 PM
Water Level Reading 3	198.44	Ft			Field	3/22/2011 2:30:00 PM

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- E Value above quantitation range
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Reviewed by:   
Lacey Ketron, Water Lab Supervisor



### Sample Analysis Report

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

**Date Reported:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**ProjectName:** Reno Creek Project  
**Lab ID:** S1103348-002  
**ClientSample ID:** PZM6-002-110322  
**COC:** RC 08015

**WorkOrder:** S1103348  
**CollectionDate:** 3/22/2011 2:30:00 PM  
**DateReceived:** 3/22/2011 5:30:00 PM  
**FieldSampler:** JS  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	170	mg/L		5	SM 2320B	3/24/2011 3:36:07 PM	KO
Alkalinity, Bicarbonate as HCO3	197	mg/L		5	SM 2320B	3/24/2011 3:36:07 PM	KO
Alkalinity, Carbonate as CO3	5	mg/L		5	SM 2320B	3/24/2011 3:36:07 PM	KO
Chloride	7	mg/L		1	EPA 300.0	3/25/2011 10:54:00 AM	KO
Fluoride	0.2	mg/L		0.1	SM 4500FC	3/24/2011 3:36:07 PM	KO
Nitrogen, Nitrate-Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	3/30/2011 11:21:00 AM	AS
Sulfate	407	mg/L		1	EPA 300.0	4/6/2011 8:12:00 PM	KO
Calcium	77	mg/L		1	EPA 200.7	4/5/2011 8:30:16 PM	DG
Magnesium	13	mg/L		1	EPA 200.7	3/24/2011 3:03:38 PM	DG
Potassium	7	mg/L		1	EPA 200.7	3/24/2011 3:03:38 PM	DG
Sodium	186	mg/L		1	EPA 200.7	3/24/2011 3:03:38 PM	DG
Nitrogen, Ammonia (As N)	0.4	mg/L		0.1	EPA 350.1	3/29/2011 11:00:00 AM	AS
Silica as SiO2	12	mg/L		1	EPA 200.7	3/24/2011 3:03:38 PM	DG
<b>General Parameters</b>							
pH	8.5	s.u.		0.1	SM 4500 H B	3/24/2011 3:36:07 PM	KO
Electrical Conductivity	1130	µmhos/cm		5	SM 2510B	3/24/2011 3:36:07 PM	KO
Total Dissolved Solids (180)	890	mg/L		10	SM 2540	3/25/2011 2:05:00 PM	AMB
<b>Data Quality</b>							
Cation Sum	13.14	meq/L		0.00	SM 1030E	4/8/2011 4:13:56 PM	LJK
Anion Sum	12.28	meq/L		0.00	SM 1030E	4/8/2011 4:13:56 PM	LJK
Cation-Anion Balance (± 5%)	3.37	%		0.00	SM 1030E	4/8/2011 4:13:56 PM	LJK
Solids, Total Dissolved (Calc)	800	mg/L		10	SM 1030E	4/8/2011 4:13:56 PM	LJK
Calculated TDS/TDS Ratio (0.80-1.20)	1.11	dec. %		0.01	Calculation	4/8/2011 4:15:16 PM	LJK

These results apply only to the samples tested.

RL - Reporting Limit

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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:** S1103348-002  
**ClientSample ID:** PZM6-002-110322  
**COC:** RC 08015

**Date Reported:** 7/7/2011  
**Report ID:** S1103348002  
 (Replaces S1103348001)

**WorkOrder:** S1103348  
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**FieldSampler:** JS  
**Matrix:** Water

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Metals - Dissolved</b>							
Aluminum	ND	mg/L		0.1	EPA 200.7	3/24/2011 3:03:38 PM	DG
Arsenic	0.002	mg/L		0.001	EPA 200.8	3/24/2011 3:09:16 PM	MS
Barium	ND	mg/L		0.1	EPA 200.8	3/24/2011 3:09:16 PM	MS
Boron	ND	mg/L		0.1	EPA 200.7	3/24/2011 3:03:38 PM	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	3/24/2011 3:09:16 PM	MS
Chromium	ND	mg/L		0.01	EPA 200.7	3/24/2011 3:03:38 PM	DG
Copper	ND	mg/L		0.01	EPA 200.8	3/24/2011 3:09:16 PM	MS
Iron	ND	mg/L		0.05	EPA 200.7	3/24/2011 3:03:38 PM	DG
Lead	ND	mg/L		0.01	EPA 200.8	3/24/2011 3:09:16 PM	MS
Manganese	0.11	mg/L		0.01	EPA 200.7	3/24/2011 3:03:38 PM	DG
Mercury	ND	mg/L		0.001	EPA 245.1	3/29/2011 9:33:08 AM	BK
Molybdenum	ND	mg/L		0.01	EPA 200.8	3/24/2011 3:09:16 PM	MS
Nickel	ND	mg/L		0.05	EPA 200.7	3/24/2011 3:03:38 PM	DG
Selenium	ND	mg/L		0.005	EPA 200.8	3/24/2011 3:09:16 PM	MS
Uranium	0.0358	mg/L		0.0003	EPA 200.8	3/24/2011 3:09:16 PM	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	3/24/2011 3:09:16 PM	MS
Zinc	ND	mg/L		0.01	EPA 200.7	3/24/2011 3:03:38 PM	DG
<b>Metals - Suspended</b>							
Uranium	0.0007	mg/L		0.0003	EPA 200.8	4/5/2011 10:17:16 AM	MS
<b>Metals - Total</b>							
Iron	0.12	mg/L		0.05	EPA 200.7	3/28/2011 4:43:04 PM	DG
Manganese	0.11	mg/L		0.01	EPA 200.7	3/28/2011 4:43:04 PM	DG

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: S1103348-002
ClientSample ID: PZM6-002-110322
COC: RC 08015

Date Reported 7/7/2011
Report ID S1103348002
(Replaces S1103348001)
WorkOrder: S1103348
CollectionDate: 3/22/2011 2:30:00 PM
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FieldSampler: JS
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.

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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Alkalinity**

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

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	04/05/11 14:57	Alkalinity, Total (As CaCO3)	ND	5					

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

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	04/05/11 14:48	Alkalinity, Total (As CaCO3)	474	5	473		100	96.6 - 103	

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

Sample ID	RunNo: 68541	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103378-002A	03/24/11 16:36	Alkalinity, Bicarbonate as HCO3	1370	5	1380	0.120		20	
		Alkalinity, Total (As CaCO3)	1130	5	1130	0.120		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104036-003A	04/05/11 17:01	Alkalinity, Bicarbonate as HCO3	ND	5	ND	0		20	
		Alkalinity, Total (As CaCO3)	ND	5	ND	0		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-009A	04/05/11 20:37	Alkalinity, Bicarbonate as HCO3	12	5	10	11.7		20	
		Alkalinity, Total (As CaCO3)	10	5	9	11.7		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-019A	04/05/11 22:25	Alkalinity, Bicarbonate as HCO3	49	5	47	4.57		20	
		Alkalinity, Total (As CaCO3)	40	5	38	4.57		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103243-005B	04/06/11 2:14	Alkalinity, Bicarbonate as HCO3	46	5	45	1.78		20	
		Alkalinity, Carbonate as CO3	ND	5	ND	0		20	
		Alkalinity, Total (As CaCO3)	37	5	37	1.77		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103491-001B	04/06/11 3:10	Alkalinity, Bicarbonate as HCO3	49	5	50	1.70		20	
		Alkalinity, Carbonate as CO3	5	5	ND	0		20	
		Alkalinity, Total (As CaCO3)	49	5	48	1.34		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Conductivity**

Sample Type **MBLK** Units: µmhos/cm

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	04/05/11 14:57	Electrical Conductivity	ND	5					

Sample Type **LCS** Units: µmhos/cm

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	04/05/11 14:48	Electrical Conductivity	975	5	1000		97.5	90 - 110	

Sample Type **DUP** Units: µmhos/cm

Sample ID	RunNo: 68541	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103378-002A	03/24/11 16:36	Electrical Conductivity	1750	5	1750	0.0571		20	

Sample ID	RunNo: 68541	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103387-001B	03/24/11 18:35	Electrical Conductivity	16500	5	16500	0.182		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104036-003A	04/05/11 17:01	Electrical Conductivity	850	5	836	1.67		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-009A	04/05/11 20:37	Electrical Conductivity	53	5	54	2.57		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-019A	04/05/11 22:25	Electrical Conductivity	190	5	190	0.263		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Dissolved Mercury by EPA 245.1 - Water**

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

Sample ID	RunNo: 68718	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LRB	03/29/11 9:24	Mercury	ND	0.001					

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

Sample ID	RunNo: 68718	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	03/29/11 9:22	Mercury	0.002	0.001	0.002		102	85 - 115	

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

Sample ID	RunNo: 68718	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103348-001E	03/29/11 9:29	Mercury	0.002	0.001	0.00244	ND	95.9	70 - 130	

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

Sample ID	RunNo: 68718	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1103348-001E	03/29/11 9:31	Mercury	0.002	0.001	0.002	2.05	93.9	0	

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

Sample ID	RunNo: 68718	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103348-001E	03/29/11 9:27	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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 68538	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	03/24/11 13:58	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: 68538	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	03/24/11 14:00	Aluminum	1.0	0.1	1		102	85 - 115	
		Boron	1.0	0.1	1		98.6	85 - 115	
		Chromium	1.03	0.01	1		103	85 - 115	
		Iron	1.03	0.05	1		103	85 - 115	
		Manganese	1.03	0.02	1		103	85 - 115	
		Nickel	1.03	0.01	1		103	85 - 115	
		Zinc	0.99	0.01	1		99.0	85 - 115	

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

Sample ID	RunNo: 68538	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103348-002ES	03/24/11 15:05	Aluminum	0.5	0.1	0.5	ND	105	70 - 130	
		Boron	0.6	0.1	0.5	ND	99.3	70 - 130	
		Chromium	0.50	0.01	0.5	ND	100	70 - 130	
		Iron	0.51	0.05	0.5	ND	98.8	70 - 130	
		Manganese	0.59	0.02	0.5	0.11	97.8	70 - 130	
		Nickel	0.49	0.01	0.5	ND	98.0	70 - 130	
		Zinc	0.50	0.01	0.5	ND	98.9	70 - 130	

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

Sample ID	RunNo: 68538	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1103348-002ESD	03/24/11 15:08	Aluminum	0.5	0.1	0.5	1.30	104	20	
		Boron	0.6	0.1	0.6	0.326	98.9	20	
		Chromium	0.49	0.01	0.50	2.27	98.1	20	
		Iron	0.50	0.05	0.51	1.24	97.5	20	
		Manganese	0.59	0.02	0.59	1.04	96.5	20	
		Nickel	0.48	0.01	0.49	1.31	96.7	20	
		Zinc	0.49	0.01	0.50	1.92	97.0	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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

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

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

Sample ID	RunNo: 68538	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103348-001ED	03/24/11 15:01	Aluminum	ND	0.1	ND	0		20	
		Boron	ND	0.1	ND	0		20	
		Chromium	ND	0.01	ND	0		20	
		Iron	ND	0.05	ND	0		20	
		Manganese	ND	0.02	ND	0		20	
		Nickel	ND	0.01	ND	0		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: 68534	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Init Cal Blank	03/24/11 14:18	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: 68534	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
lcs	03/24/11 14:26	Arsenic	0.100	0.005	0.1		99.8	85 - 115	
		Barium	ND	0.5	0.1		97.2	85 - 115	
		Cadmium	0.099	0.002	0.1		98.9	85 - 115	
		Copper	0.09	0.01	0.1		89.7	85 - 115	
		Lead	0.09	0.02	0.1		94.6	85 - 115	
		Molybdenum	0.09	0.02	0.1		91.7	85 - 115	
		Selenium	0.100	0.005	0.1		99.6	85 - 115	
		Uranium	0.098	0.001	0.1		97.6	85 - 115	
		Vanadium	0.10	0.02	0.1		98.9	85 - 115	

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

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** AUC LLC  
**Work Order:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 68534	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
lcs	03/24/11 19:05	Arsenic	0.101	0.005	0.1		101	85 - 115	
		Barium	ND	0.5	0.1		99.1	85 - 115	
		Cadmium	0.102	0.002	0.1		102	85 - 115	
		Copper	0.10	0.01	0.1		97.1	85 - 115	
		Lead	0.10	0.02	0.1		97.6	85 - 115	
		Molybdenum	0.09	0.02	0.1		94.8	85 - 115	
		Selenium	0.101	0.005	0.1		101	85 - 115	
		Uranium	0.100	0.001	0.1		99.5	85 - 115	
		Vanadium	0.10	0.02	0.1		100	85 - 115	

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

Sample ID	RunNo: 68534	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103389-001Cs	03/24/11 14:49	Antimony	1.15	0.005	1.1	0.005	104	70 - 130	
		Arsenic	2.05	0.005	1.1	1.09	87.7	70 - 130	
		Barium	1.1	0.5	1.1	ND	98.8	70 - 130	
		Cadmium	1.11	0.002	1.1	ND	101	70 - 130	
		Copper	1.03	0.01	1.1	ND	92.5	70 - 130	
		Lead	1.03	0.02	1.1	ND	94.0	70 - 130	
		Molybdenum	1.15	0.02	1.1	0.12	93.9	70 - 130	
		Selenium	1.13	0.005	1.1	0.008	102	70 - 130	
		Silver	1.13	0.003	1.1	ND	102	70 - 130	
		Uranium	1.09	0.001	1.1	0.004	99.0	70 - 130	
		Vanadium	1.14	0.02	1.1	ND	103	70 - 130	

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

Sample ID	RunNo: 68534	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1103389-001Cmsd	03/24/11 14:53	Antimony	1.17	0.005	1.15	1.46	106	20	
		Arsenic	2.11	0.005	2.05	2.92	93.1	20	
		Barium	1.2	0.5	1.1	3.46	102	20	
		Cadmium	1.14	0.002	1.11	2.57	104	20	
		Copper	1.04	0.01	1.03	1.07	93.5	20	
		Lead	1.08	0.02	1.03	3.98	97.8	20	
		Molybdenum	1.18	0.02	1.15	2.22	96.2	20	
		Selenium	1.16	0.005	1.13	2.72	105	20	
		Silver	1.13	0.003	1.13	0.105	102	20	
		Uranium	1.12	0.001	1.09	2.71	102	20	
		Vanadium	1.14	0.02	1.14	0.191	103	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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011

**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 68534	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103389-001Cd	03/24/11 14:45	Arsenic	1.09	0.005	1.09	0.790		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	0.13	0.02	0.12	1.94		20	
		Selenium	0.008	0.005	0.008	0.823		20	
		Uranium	0.004	0.001	0.004	0.517		20	
		Vanadium	ND	0.02	ND	0		20	

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

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	04/05/11 14:57	Fluoride	ND	0.1					

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

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	04/05/11 14:48	Fluoride	2.8	0.1	2.82		99.9	86.1 - 114	

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

Sample ID	RunNo: 68541	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103313-1SPK	03/24/11 14:56	Fluoride	2.3	0.1	2.5	ND	90.1	80 - 120	

Sample ID	RunNo: 68541	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103389-3SPK	03/24/11 19:13	Fluoride	2.2	0.1	2.5	ND	89.6	80 - 120	

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1104041-2SPK	04/05/11 19:12	Fluoride	2.4	0.1	2.5	ND	94.3	80 - 120	

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1104041-23SPK	04/05/11 23:08	Fluoride	2.1	0.1	2.5	ND	84.8	80 - 120	

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

Sample ID	RunNo: 68541	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103299-001A	03/24/11 14:19	Fluoride	0.6	0.1	0.6	1.96		20	

Sample ID	RunNo: 68541	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103313-002A	03/24/11 15:06	Fluoride	0.1	0.1	0.1	6.34		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011

**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104036-003A	04/05/11 17:01	Fluoride	ND	0.1	ND	0		20	
Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-009A	04/05/11 20:37	Fluoride	0.2	0.1	0.2	2.17		20	
Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-019A	04/05/11 22:25	Fluoride	0.6	0.1	0.6	2.43		20	

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

Sample ID	RunNo: 69264	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-104	04/17/11 21:40	Gross Alpha (Dissolved)	ND	2					
		Gross Beta (Dissolved)	ND	3					

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

Sample ID	RunNo: 69264	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-104	04/17/11 21:40	Gross Alpha (Dissolved)	71	2	69		103	72.6 - 137	
		Gross Beta (Dissolved)	129	3	130		100	72.6 - 137	

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

Sample ID	RunNo: 69264	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103491-001GMS	04/17/11 21:40	Gross Alpha (Dissolved)	58	2	69	ND	84.1	44.4 - 137	
		Gross Beta (Dissolved)	138	3	130	4	104	44.4 - 137	
Sample ID	RunNo: 69264	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103495-001FMS	04/17/11 21:40	Gross Alpha (Dissolved)	86	2	69	12	108	44.4 - 137	
		Gross Beta (Dissolved)	140	3	130	5	104	44.4 - 137	

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

Sample ID	RunNo: 69264	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103494-001FDUP	04/17/11 21:40	Gross Alpha (Dissolved)	110 ± 3.7	2	120	8.66		20	
		Gross Beta (Dissolved)	31.0 ± 1.6	3	34	7.57		20	
Sample ID	RunNo: 69264	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103495-002FDUP	04/17/11 21:40	Gross Alpha (Dissolved)	17.3 ± 1.5	2	15	12.4		20	
		Gross Beta (Dissolved)	6.3 ± 1.2	3	7	11.2		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Anions by ION Chromatography**

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

Sample ID	RunNo: 68964	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	04/06/11 16:25	Chloride	ND	1					
		Sulfate	ND	1					

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

Sample ID	RunNo: 68619	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	03/25/11 8:54	Chloride	29	1	30		97.0	90 - 110	
		Sulfate	140	1	150		93.1	90 - 110	

Sample ID	RunNo: 68964	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DIONEX	04/06/11 13:03	Chloride	30	1	30		98.7	90 - 110	
		Sulfate	139	1	150		92.8	90 - 110	

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

Sample ID	RunNo: 68619	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103389-003ASPK	03/25/11 11:54	Chloride	8	1	5	2	117	80 - 120	
		Sulfate	41	1	40	2	98.0	80 - 120	

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

Sample ID	RunNo: 68619	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103389-003A	03/25/11 11:42	Chloride	2	1	2	0.936		20	
		Sulfate	2	1	2	2.42		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011

**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 68537	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	03/24/11 13:58	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

Sample ID	RunNo: 68912	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	04/05/11 16:31	Calcium	ND	1					
		Magnesium	ND	1					
		Potassium	ND	1					
		Sodium	ND	1					

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

Sample ID	RunNo: 68537	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	03/24/11 14:03	Calcium	41	1	40		103	85 - 115	
		Magnesium	40	1	40		99.4	85 - 115	
		Potassium	39	1	40		97.0	85 - 115	
		Sodium	39	1	40		96.6	85 - 115	

Sample ID	RunNo: 68912	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
CAT LCS IML3	04/05/11 16:36	Calcium	38	1	40		96.0	85 - 115	
		Magnesium	39	1	40		96.7	85 - 115	
		Potassium	39	1	40		96.2	85 - 115	
		Sodium	38	1	40		94.5	85 - 115	

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

Sample ID	RunNo: 68537	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103348-002BS	03/24/11 15:05	Calcium	96	1	25	78	73.0	70 - 130	
		Magnesium	38	1	25	13	101	70 - 130	
		Potassium	37	1	25	7	119	70 - 130	
		Sodium	196	1	25	186	39.6	70 - 130	S

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

Sample ID	RunNo: 68537	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1103348-002BSD	03/24/11 15:08	Calcium	95	1	96	0.723	70.2	20	
		Magnesium	37	1	38	1.49	98.9	20	
		Potassium	37	1	37	0.731	118	20	
		Sodium	197	1	196	0.252	41.6	20	S

**Qualifiers:**

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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** AUC LLC  
**Work Order:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Cations by ICP (Method 200.7)**

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

Sample ID	RunNo: 68537	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103348-001BD	03/24/11 15:01	Calcium	81	1	80	1.09		20	
		Magnesium	5	1	5	1.35		20	
		Potassium	13	1	13	0.541		20	
		Sodium	173	1	170	1.76		20	

**Nitrogen, Ammonia (as N)**

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

Sample ID	RunNo: 68690	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Blank	03/29/11 10:18	Nitrogen, Ammonia (As N)	ND	0.1					

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

Sample ID	RunNo: 68690	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	03/29/11 10:20	Nitrogen, Ammonia (As N)	8.6	0.1	8.93		95.8	90 - 110	

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

Sample ID	RunNo: 68690	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
s1103358-005b	03/29/11 11:07	Nitrogen, Ammonia (As N)	13.5	0.5	10	3.8	97.4	80 - 120	

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

Sample ID	RunNo: 68690	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
s1103358-005b	03/29/11 11:06	Nitrogen, Ammonia (As N)	3.6	0.5	3.8	4.56		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

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

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

Sample ID	RunNo: 68728	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLANK	03/30/11 11:16	Nitrogen, Nitrate-Nitrite (as N)	ND	0.1					

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

Sample ID	RunNo: 68728	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
QC	03/30/11 11:13	Nitrogen, Nitrate-Nitrite (as N)	8.2	0.1	7.69		106	90 - 110	

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

Sample ID	RunNo: 68728	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
s1103450-001d	03/30/11 11:29	Nitrogen, Nitrate-Nitrite (as N)	10.9	0.05	10	ND	109	80 - 120	

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

Sample ID	RunNo: 68728	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
s1103450-001d	03/30/11 11:28	Nitrogen, Nitrate-Nitrite (as N)	ND	0.05	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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Lead 210 and Polonium 210**

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

Sample ID	RunNo: 69361	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-097 04/20/11 9:49 Polonium 210 (Suspended) ND 1

Sample ID	RunNo: 69361	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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DMB11-097 04/20/11 11:07 Polonium 210 (Suspended) ND 1

Sample ID	RunNo: 69362	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-094 04/19/11 19:25 Lead 210 (Dissolved) ND 1

Sample ID	RunNo: 69473	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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MB11-094 04/21/11 9:24 Polonium 210 (Dissolved) ND 1

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

Sample ID	RunNo: 69361	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-097 04/20/11 9:49 Polonium 210 (Suspended) 15 1 13.1 113 48.6 - 156

Sample ID	RunNo: 69362	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-094 04/19/11 19:25 Lead 210 (Dissolved) 15 1 13.1 116 48.6 - 156

Sample ID	RunNo: 69473	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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LCS11-094 04/21/11 9:24 Polonium 210 (Dissolved) 12 1 13.1 93.6 48.6 - 156

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

Sample ID	RunNo: 69362	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1103348-001GMS 04/19/11 19:25 Lead 210 (Dissolved) 14 1 13.1 1 92.5 66 - 133

Sample ID	RunNo: 69362	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1103348-002GMS 04/19/11 19:25 Lead 210 (Dissolved) 19 1 13.1 5 107 66 - 133

Sample ID	RunNo: 69473	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1103348-002GMS 04/21/11 9:24 Polonium 210 (Dissolved) 3 1 13.1 ND 23.7 66 - 133

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

Sample ID	RunNo: 69362	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1103410-001DDUP 04/19/11 19:25 Lead 210 (Dissolved) 1.1 ± 0.5 1 1 8.36 20

Sample ID	RunNo: 69473	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1103410-001DDUP 04/21/11 9:24 Polonium 210 (Dissolved) ND 1 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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Radium 228**

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

Sample ID	RunNo: 69254	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-101	04/15/11 15:32	Radium 228 (Dissolved)	ND	1					

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

Sample ID	RunNo: 69254	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-101	04/15/11 15:32	Radium 228 (Dissolved)	15	1	13.9		107	74.9 - 122	

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

Sample ID	RunNo: 69254	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103348-001GMS	04/15/11 15:32	Radium 228 (Dissolved)	16	1	13.9	ND	113	48.4 - 167	

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

Sample ID	RunNo: 69254	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103348-002GDUP	04/15/11 15:32	Radium 228 (Dissolved)	ND	1	ND	0		20	

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 69095	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-090B	04/08/11 10:32	Radium 226 (Dissolved)	ND	0.2					

Sample ID	RunNo: 69095	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DMB11-090B	04/08/11 13:31	Radium 226 (Suspended)	ND	0.2					

Sample ID	RunNo: 69170	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-096	04/13/11 17:39	Radium 226 (Dissolved)	ND	0.2					

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

Sample ID	RunNo: 69095	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-090B	04/08/11 10:32	Radium 226 (Dissolved)	5.2	0.2	5		104	69.3 - 130	

Sample ID	RunNo: 69095	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DLCS11-090B	04/08/11 13:31	Radium 226 (Suspended)	4.2	0.2	5		84.3	69.3 - 130	

Sample ID	RunNo: 69170	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-096	04/13/11 17:39	Radium 226 (Dissolved)	4.9	0.2	5		98.5	69.3 - 130	

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

Sample ID	RunNo: 69095	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103281-005FMS	04/08/11 10:32	Radium 226 (Dissolved)	17.0	0.2	5	10.7	124	54.6 - 137	

- 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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Radium 226 by SM 7500**

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

Sample ID	RunNo: 69095	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1103274-005GMS 04/08/11 16:44 Radium 226 (Suspended) 5.3 0.2 5 ND 106 54.6 - 137

Sample ID	RunNo: 69170	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1103324-001EMS 04/13/11 17:39 Radium 226 (Dissolved) 4.4 0.2 5 0.3 82.0 54.6 - 137

Sample ID	RunNo: 69170	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
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S1103410-001DMS 04/14/11 10:28 Radium 226 (Dissolved) 5.1 0.2 5 ND 101 54.6 - 137

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

Sample ID	RunNo: 69095	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1103281-007FDUP 04/08/11 10:32 Radium 226 (Dissolved) 2.0 ± 0.2 0.2 2.5 20.0 20

Sample ID	RunNo: 69095	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1103274-006GDUP 04/08/11 16:44 Radium 226 (Suspended) ND 0.2 ND 0 20

Sample ID	RunNo: 69170	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1103324-002EDUP 04/13/11 17:39 Radium 226 (Dissolved) 0.2 ± 0.1 0.2 0.3 22.8 20 R

Sample ID	RunNo: 69170	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
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S1103410-002DDUP 04/14/11 10:28 Radium 226 (Dissolved) 0.4 ± 0.1 0.2 0.3 6.41 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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 69252	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-095	04/11/11 9:40	Thorium 230 (Dissolved)	ND	0.2					

Sample ID	RunNo: 69302	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB11-095	04/13/11 10:07	Thorium 230 (Suspended)	ND	0.2					

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

Sample ID	RunNo: 69252	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-095	04/11/11 9:40	Thorium 230 (Dissolved)	11	0.2	12		91.9	50 - 150	

Sample ID	RunNo: 69302	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS11-095	04/13/11 10:07	Thorium 230 (Suspended)	12	0.2	12		99.2	50 - 150	

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

Sample ID	RunNo: 69252	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103485-001GDUP	04/11/11 17:53	Thorium 230 (Dissolved)	ND	0.2	ND	0		20	

Sample ID	RunNo: 69302	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103281-004FDUP	04/13/11 14:10	Thorium 230 (Suspended)	ND	0.2	ND	0		20	

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

Sample ID	RunNo: 68894	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB-R68894	03/23/11 0:00	Radon-222	ND	50					L

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

Sample ID	RunNo: 68894	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS-R68894	03/23/11 0:00	Radon-222	23900	100	22500		106	75 - 125	L

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

Sample ID	RunNo: 68539	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MBLK DISS/CAT	03/24/11 13:58	Silica as SiO2	ND	0.1					

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

Sample ID	RunNo: 68539	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DISS LCS Q	03/24/11 14:00	Silica as SiO2	2.1	0.1	2.14		98.4	85 - 115	

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

Sample ID	RunNo: 68539	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103348-001ED	03/24/11 15:01	Silica as SiO2	5.1	0.1	5.1	0.193		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 68591	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	03/23/11 13:10	Total Dissolved Solids (180)	ND	10					

Sample ID	RunNo: 68644	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
DI	03/25/11 13:55	Total Dissolved Solids (180)	ND	10					

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

Sample ID	RunNo: 68591	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Control	03/23/11 13:15	Total Dissolved Solids (180)	220	10	226		98.2	90 - 110	

Sample ID	RunNo: 68644	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Control	03/25/11 14:00	Total Dissolved Solids (180)	220	10	226		98.2	90 - 110	

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

Sample ID	RunNo: 68591	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103330-001A	03/23/11 13:30	Total Dissolved Solids (180)	1600	10	1580	1.52		20	

Sample ID	RunNo: 68591	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103340-005A	03/23/11 14:55	Total Dissolved Solids (180)	2180	20	2180	0.368		20	

Sample ID	RunNo: 68591	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103346-002A	03/23/11 15:35	Total Dissolved Solids (180)	6940	10	6840	1.46		20	

Sample ID	RunNo: 68591	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103351-001A	03/23/11 16:30	Total Dissolved Solids (180)	2000	10	1980	0.806		20	

Sample ID	RunNo: 68591	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103358-001A	03/23/11 16:50	Total Dissolved Solids (180)	1830	20	1820	0.219		20	

Sample ID	RunNo: 68644	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103377-004A	03/25/11 14:55	Total Dissolved Solids (180)	2770	10	2770	0		20	

Sample ID	RunNo: 68644	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103380-001A	03/25/11 15:50	Total Dissolved Solids (180)	1160	10	1150	0.347		20	

Sample ID	RunNo: 68644	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103395-001B	03/25/11 16:45	Total Dissolved Solids (180)	260	10	250	3.15		20	

Sample ID	RunNo: 68644	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103399-003B	03/25/11 17:45	Total Dissolved Solids (180)	1870	10	1860	0.647		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
 (Replaces S1103348001)

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

Sample ID	RunNo: 68644	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103412-005A	03/25/11 18:40	Total Dissolved Solids (180)	670	10	660	0.301		20	
Sample ID	RunNo: 68644	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103424-001A	03/25/11 19:35	Total Dissolved Solids (180)	200	10	210	2.91		20	

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

Sample ID	RunNo: 68671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK 3/25 TOT -4991	03/28/11 16:10	Iron	ND	0.05					
		Manganese	ND	0.02					
Sample ID	RunNo: 68671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK 3/28 TOT -4994	03/28/11 16:22	Iron	ND	0.05					
		Manganese	ND	0.02					

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

Sample ID	RunNo: 68671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS 3/25 TOT -4991	03/28/11 16:12	Iron	0.47	0.05	0.5		94.8	85 - 115	
		Manganese	0.19	0.02	0.2		96.0	85 - 115	
Sample ID	RunNo: 68671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS 3/28 TOT -4994	03/28/11 16:24	Iron	0.48	0.05	0.5		95.6	85 - 115	
		Manganese	0.19	0.02	0.2		96.7	85 - 115	

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

Sample ID	RunNo: 68671	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103348-002FS	03/28/11 16:45	Iron	0.56	0.05	0.5	0.12	89.0	70 - 130	
		Manganese	0.30	0.02	0.2	0.11	93.5	70 - 130	

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

Sample ID	RunNo: 68671	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1103348-002FSD	03/28/11 16:47	Iron	0.56	0.05	0.56	0.463	89.5	20	
		Manganese	0.30	0.02	0.30	0.302	94.0	20	

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

Sample ID	RunNo: 68671	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103348-001FD	03/28/11 16:40	Iron	ND	0.05	ND	0		20	
		Manganese	ND	0.02	ND	0		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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**Suspended Natural Uranium**

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

Sample ID	RunNo: 68908	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
blk	04/05/11 9:39	Uranium Suspended	ND	0.0003					

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

Sample ID	RunNo: 68908	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
lcs	04/05/11 9:34	Uranium Suspended	0.0918	0.0003	0.1		91.8	85 - 115	

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

Sample ID	RunNo: 68908	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103274-001Hs	04/05/11 9:50	Uranium Suspended	1.02	0.0003	1.1	ND	93.1	70 - 130	

Sample ID	RunNo: 68908	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1103374-001Hs	04/05/11 10:25	Uranium Suspended	1.00	0.0003	1.1	ND	91.0	70 - 130	

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

Sample ID	RunNo: 68908	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1103274-001Hmsd	04/05/11 9:53	Uranium Suspended	1.01	0.0003	1.02	1.20	92.0	20	

Sample ID	RunNo: 68908	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1103374-001Hmsd	04/05/11 10:28	Uranium Suspended	0.987	0.0003	1.00	1.41	89.7	20	

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

Sample ID	RunNo: 68908	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103274-001Hd	04/05/11 9:47	Uranium Suspended	ND	0.0003	ND	0		20	

Sample ID	RunNo: 68908	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103374-001Hd	04/05/11 10:22	Uranium Suspended	ND	0.0003	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:** S1103348  
**Project:** Reno Creek Project

**Date:** 7/7/2011  
**Report ID:** S1103348002  
(Replaces S1103348001)

**pH Water**

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

Sample ID	RunNo: 68913	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
ATQC	04/05/11 14:48	pH	10.8	0.1	10.7		101	94.8 - 105	

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

Sample ID	RunNo: 68541	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103378-002A	03/24/11 16:36	pH	8.1	0.1	8.1	0.698		20	

Sample ID	RunNo: 68541	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1103387-001B	03/24/11 18:35	pH	9.0	0.1	9.0	0.166		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104036-003A	04/05/11 17:01	pH	2.9	0.1	2.9	1.18		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104037-001B	04/05/11 18:38	pH	8.5	0.1	8.5	0.139		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-009A	04/05/11 20:37	pH	7.1	0.1	7.0	1.42		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104041-019A	04/05/11 22:25	pH	8.1	0.1	8.1	0.602		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104046-004B	04/05/11 23:56	pH	7.9	0.1	7.9	0.0517		20	

Sample ID	RunNo: 68913	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1104052-001C	04/06/11 0:31	pH	7.8	0.1	7.8	0.360		20	

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

Client Name: **AUC LLC** Project Identification: **Reno Creek Project** Sampler/Signature/Printed: *Justin Scott* Telephone #: **(507) 265-0696**

Report Address: **peavendor@auc-llc.com;** Contact Name: **Traci Nickerson** Email: **peavendor@auc-llc.com;** Phone: **(307) 265-0696**

Invoice Address: **AUC LLC** Purchase Order #: **Quote #**

ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME	SAMPLE IDENTIFICATION	Matrix	# of Containers	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 WYPDES Discharge	See Attached Table 9 (Blanks)	REMARKS
1	51103348	3/22/11	1235	P2M18-002-110322	W	13								Ground water
2	002	3/22/11	1430	P2M18-002-110322	W	13								Ground water
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														

LAB COMMENTS: Relinquished By (Signature/Printed): *Justin Scott* DATE: 3/22/11 TIME: 4:30 Received By (Signature/Printed): *Justin Scott / Kathy Brown* DATE: 3/22/11 TIME: 9:15D

SHIPPING INFO:  UPS  Fed Express  US Mail  Hand Carried  Other

MATRIX CODES: Water  Soil  Solid  Trip Blank  Other

TURNAROUND TIMES:  Standard turnaround  RUSH - 5 Working Days  URGENT - < 2 Working Days

COMPLIANCE INFORMATION: Compliance Monitoring?  Program (SDWA, NPDES,...) PWSID / Permit # Chlorinated? Sample Disposal: Lab  Client

ADDITIONAL REMARKS: