



Inter-Mountain Labs  
Sheridan, WY and Gillette, WY

- CHAIN OF CUSTODY RECORD -

All shaded fields must be completed.  
This is a legal document: any misrepresentation may be construed as fraud.

Page of  
# 146809

Client Name <b>RER</b>	Project Identification <b>UPON AIR</b>	Sampler (Signature/Attestation of Authenticity) <i>[Signature]</i>	Telephone # <b>283-3500</b>
Report Address <b>2209 E. Cleveland Ave P.O. Box 40 Sundance, WY 82729</b>	Contact Name <b>Kris Thompson</b>	ANALYSES / PARAMETERS	
Invoice Address	Email <b>kthompson@rurcelement.com</b>		
Phone <b>307-283-3500</b>	<b>Resources.com</b>		
Purchase Order #		Quote #	

ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SAMPLE IDENTIFICATION	Matrix	# of Containers	Le	Lo	U	Th	Ra-226	Th-230	REMARKS
1		<del>3/4/14</del>	<del>1130</del>										
2	<b>51404130</b>	<b>12/20/13</b>	<b>1040</b>	<b>UAMS#3 8671542</b>	<b>OT</b>	<b>1</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	
3	<b>002</b>	<b>12/30/13</b>	<b>1420</b>	<b>UAMS#4 8671541</b>									
4	<b>003</b>	<b>1/7/14</b>	<b>1130</b>	<b>UAMS#5 8671540</b>									
5	<b>004</b>	<b>1/20/14</b>	<b>1520</b>	<b>UAMS#2 8671539</b>									
6	<b>005</b>	<b>2/3/14</b>	<b>1210</b>	<b>UAMS#3 8671538</b>									
7	<b>006</b>	<b>2/17/14</b>	<b>1235</b>	<b>UAMS#4 8671537</b>									
8	<b>007</b>	<b>3/1/14</b>											
9	<b>007</b>	<b>2/25/14</b>	<b>1125</b>	<b>UAMS#5 8671536</b>									
10													
11	<b>008</b>	<b>11/27/13</b>	<b>0905</b>	<b>AMS#1 8298182</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>BOARLOGG Filter</b>
12													
13													
14													

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
	<i>[Signature]</i> Robbie Grubbs	<b>4/7/14</b>	<b>1045</b>	<i>[Signature]</i> A. McNeil	<b>04/07/14</b>	<b>1045</b>
	<i>[Signature]</i> T.M.L.	<b>4/8/14</b>	<b>15:09</b>	<i>[Signature]</i> John M. Jacobs	<b>4/8/14</b>	<b>1510</b>

SHIPPING INFO	MATRIX CODES	TURNAROUND TIMES	COMPLIANCE INFORMATION	ADDITIONAL REMARKS
<input type="checkbox"/> UPS	Water WT	Check desired service	Compliance Monitoring? Y / N	
<input type="checkbox"/> Fed Express	Soil SL	<input checked="" type="checkbox"/> Standard turnaround	Program (SDWA, NPDES,...)	
<input type="checkbox"/> US Mail	Solid SD	<input type="checkbox"/> RUSH - 5 Working Days	PWSID / Permit #	
<input type="checkbox"/> Hand Carried	Filter FT	<input type="checkbox"/> URGENT - < 2 Working Days	Chlorinated? Y / N	
<input type="checkbox"/> Other	Other OT	Rush & Urgent Surcharges will be applied	Sample Disposal: Lab Client	



**Date:** 6/3/2014**CLIENT:** Rare Element Resources (RER)**Project:** Upton Air**Lab Order:** S1404130**CASE NARRATIVE****Report ID:** S1404130001

Samples AMS#1 8298182, UAMS#2 8671539, UAMS#3 8671538, UAMS#3 8671542, UAMS#4 8671537, UAMS#4 8671541, UAMS#5 8671536, and UAMS#5 8671540 were received on April 7, 2014.

All samples were received and analyzed within the EPA recommended holding times, except those noted below in this case narrative. Samples were analyzed using the methods outlined in the following references:

"Standard Methods For The Examination of Water and Wastewater", approved method versions

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition

40 CFR Parts 136 and 141

40 CFR Part 50, Appendices B, J, L, and O

Methods indicated in the Methods Update Rule published in the Federal Register Friday, May 18, 2012

ASTM approved and recognized standards

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

**Sample Analysis Report**

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-001  
**ClientSample ID:** UAMS#3 8671542  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 12/20/2013 10:40:00 AM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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**Field**

Actual Volume	32812285	Liters			Field	12/20/2013 1040
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**Radionuclides - Filter**

Radium 226	ND	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	ND	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226	2.39E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	2.39E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230	ND	pCi/Filter	0.6	ACW10	05/01/2014 935	KK
Thorium-230 Precision (±)	ND	pCi/Filter	0.6	ACW10	05/01/2014 935	KK
Thorium 230	2.81E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	2.81E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN

**Metals - Filter**

Cerium	ND	µg/Filter	16	IO-3.5	04/14/2014 1317	MS
Cerium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16	IO-3.5	04/14/2014 1317	MS
Lanthanum	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16	IO-3.5	04/14/2014 1416	MS
Thorium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15	IO-3.5	04/14/2014 1317	MS
Uranium	ND	µg/m <sup>3</sup>	15	IO-3.5	06/03/2014 938	WN

**These results apply only to the samples tested.****RL - Reporting Limit**

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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
	M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



## Sample Analysis Report

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-002  
**ClientSample ID:** UAMS#4 8671541  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 12/30/2013 2:20:00 PM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Field

Actual Volume	74476482	Liters			Field	12/30/2013 1420
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## Radionuclides - Filter

Radium 226	1.3	pCi/Filter	0.6		SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	0.6	pCi/Filter	0.6		SM 7500RAB	04/21/2014 1035	MB
Radium 226	6.39E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	6.39E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN
Thorium 230	ND	pCi/Filter	0.6		ACW10	05/01/2014 935	KK
Thorium-230 Precision (±)	ND	pCi/Filter	0.6		ACW10	05/01/2014 935	KK
Thorium 230	1.40E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	1.40E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN

## Metals - Filter

Cerium	ND	µg/Filter	16		IO-3.5	04/14/2014 1323	MS
Cerium	ND	µg/m <sup>3</sup>	16		IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16		IO-3.5	04/14/2014 1323	MS
Lanthanum	ND	µg/m <sup>3</sup>	16		IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16		IO-3.5	04/14/2014 1323	MS
Thorium	ND	µg/m <sup>3</sup>	16		IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15		IO-3.5	04/14/2014 1323	MS
Uranium	ND	µg/m <sup>3</sup>	15		IO-3.5	06/03/2014 938	WN

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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
	M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



## Sample Analysis Report

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-003  
**ClientSample ID:** UAMS#5 8671540  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 1/7/2014 11:30:00 AM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Field

Actual Volume	86540169	Liters			Field	01/07/2014 1130
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## Radionuclides - Filter

Radium 226	3.3	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	0.6	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226	1.42E-6	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	1.42E-6	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230	ND	pCi/Filter	0.6	ACW10	05/01/2014 935	KK
Thorium-230 Precision (±)	ND	pCi/Filter	0.6	ACW10	05/01/2014 935	KK
Thorium 230	1.63E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	1.63E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN

## Metals - Filter

Cerium	ND	µg/Filter	16	IO-3.5	04/14/2014 1336	MS
Cerium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16	IO-3.5	04/14/2014 1336	MS
Lanthanum	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16	IO-3.5	04/14/2014 1419	MS
Thorium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15	IO-3.5	04/14/2014 1336	MS
Uranium	ND	µg/m <sup>3</sup>	15	IO-3.5	06/03/2014 938	WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** 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 or is less than LCL  
O Outside the Range of Dilutions  
X Matrix Effect

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

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

**Sample Analysis Report**

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-004  
**ClientSample ID:** UAMS#2 8671539  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 1/20/2014 3:20:00 PM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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**Field**

Actual Volume	103478361	Liters			Field	01/20/2014 1520
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**Radionuclides - Filter**

Radium 226	ND	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	ND	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226	1.97E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	1.97E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230	ND	pCi/Filter	0.6	ACW10	05/01/2014 935	KK
Thorium-230 Precision (±)	ND	pCi/Filter	0.6	ACW10	05/01/2014 935	KK
Thorium 230	5.88E-8	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	5.88E-8	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN

**Metals - Filter**

Cerium	ND	µg/Filter	16	IO-3.5	04/14/2014 1342	MS
Cerium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16	IO-3.5	04/14/2014 1342	MS
Lanthanum	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16	IO-3.5	04/14/2014 1342	MS
Thorium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15	IO-3.5	04/14/2014 1342	MS
Uranium	ND	µg/m <sup>3</sup>	15	IO-3.5	06/03/2014 938	WN

**These results apply only to the samples tested.****RL - Reporting Limit**

**Qualifiers:** 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 or is less than LCL  
O Outside the Range of Dilutions  
X Matrix Effect

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

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



## Sample Analysis Report

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-005  
**ClientSample ID:** UAMS#3 8671538  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 2/3/2014 12:10:00 PM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Field

Actual Volume	60494473	Liters			Field	02/03/2014 1210
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## Radionuclides - Filter

Radium 226	0.7	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	0.6	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226	4.11E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	4.11E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230	ND	pCi/Filter	0.6	ACW10	05/02/2014 924	KK
Thorium-230 Precision (±)	ND	pCi/Filter	0.6	ACW10	05/02/2014 924	KK
Thorium 230	2.60E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	2.60E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN

## Metals - Filter

Cerium	ND	µg/Filter	16	IO-3.5	04/14/2014 1346	MS
Cerium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16	IO-3.5	04/14/2014 1346	MS
Lanthanum	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16	IO-3.5	04/14/2014 1346	MS
Thorium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15	IO-3.5	04/14/2014 1346	MS
Uranium	ND	µg/m <sup>3</sup>	15	IO-3.5	06/03/2014 938	WN

These results apply only to the samples tested.

## RL - Reporting Limit

**Qualifiers:** 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 or is less than LCL  
O Outside the Range of Dilutions  
X Matrix Effect

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

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



## Sample Analysis Report

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-006  
**ClientSample ID:** UAMS#4 8671537  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 2/17/2014 12:35:00 PM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Field

Actual Volume	50825048	Liters			Field	02/17/2014 1235
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## Radionuclides - Filter

Radium 226	0.7	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	0.6	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226	4.83E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	4.83E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230	ND	pCi/Filter	0.6	ACW10	05/02/2014 924	KK
Thorium-230 Precision (±)	ND	pCi/Filter	0.6	ACW10	05/02/2014 924	KK
Thorium 230	1.06E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	1.06E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN

## Metals - Filter

Cerium	ND	µg/Filter	16	IO-3.5	04/14/2014 1349	MS
Cerium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16	IO-3.5	04/14/2014 1349	MS
Lanthanum	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16	IO-3.5	04/14/2014 1349	MS
Thorium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15	IO-3.5	04/14/2014 1349	MS
Uranium	ND	µg/m <sup>3</sup>	15	IO-3.5	06/03/2014 938	WN

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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
	M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager





## Sample Analysis Report

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-007  
**ClientSample ID:** UAMS#5 8671536  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 2/25/2014 11:25:00 AM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Field

Actual Volume	58284999	Liters			Field	02/25/2014 1125
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## Radionuclides - Filter

Radium 226	1.3	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	0.6	pCi/Filter	0.6	SM 7500RAB	04/21/2014 1035	MB
Radium 226	8.17E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	8.17E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230	0.6	pCi/Filter	0.6	ACW10	05/02/2014 924	KK
Thorium-230 Precision (±)	0.6	pCi/Filter	0.6	ACW10	05/02/2014 924	KK
Thorium 230	3.83E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	3.83E-7	Bq/m <sup>3</sup>	3.70E-6	Calculation	06/03/2014 938	WN

## Metals - Filter

Cerium	ND	µg/Filter	16	IO-3.5	04/14/2014 1352	MS
Cerium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16	IO-3.5	04/14/2014 1352	MS
Lanthanum	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16	IO-3.5	04/14/2014 1352	MS
Thorium	ND	µg/m <sup>3</sup>	16	IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15	IO-3.5	04/14/2014 1352	MS
Uranium	ND	µg/m <sup>3</sup>	15	IO-3.5	06/03/2014 938	WN

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	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
	M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
	O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



## Sample Analysis Report

**Company:** Rare Element Resources (RER)  
P.O. Box 1475  
Sundance, WY 82729

**Date Reported** 6/3/2014  
**Report ID** S1404130001

**ProjectName:** Upton Air  
**Lab ID:** S1404130-008  
**ClientSample ID:** AMS#1 8298182  
**COC:** 146809

**WorkOrder:** S1404130  
**CollectionDate:** 11/27/2013 9:05:00 AM  
**DateReceived:** 4/7/2014 10:45:00 AM  
**FieldSampler:** PS  
**Matrix:** Filter

## Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
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## Field

Actual Volume	57035840	Liters			Field	11/27/2013 905
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## Radionuclides - Filter

Radium 226	ND	pCi/Filter	0.6		SM 7500RAB	04/21/2014 1035	MB
Radium 226 Precision (±)	ND	pCi/Filter	0.6		SM 7500RAB	04/21/2014 1035	MB
Radium 226	1.92E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN
Radium 226 Precision (±)	1.92E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN
Thorium 230	ND	pCi/Filter	0.6		ACW10	05/02/2014 924	KK
Thorium-230 Precision (±)	ND	pCi/Filter	0.6		ACW10	05/02/2014 924	KK
Thorium 230	2.13E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN
Thorium 230 Precision (±)	2.13E-7	Bq/m <sup>3</sup>	3.70E-6		Calculation	06/03/2014 938	WN

## Metals - Filter

Cerium	ND	µg/Filter	16		IO-3.5	04/14/2014 1355	MS
Cerium	ND	µg/m <sup>3</sup>	16		IO-3.5	06/03/2014 938	WN
Lanthanum	ND	µg/Filter	16		IO-3.5	04/14/2014 1355	MS
Lanthanum	ND	µg/m <sup>3</sup>	16		IO-3.5	06/03/2014 938	WN
Thorium	ND	µg/Filter	16		IO-3.5	04/14/2014 1355	MS
Thorium	ND	µg/m <sup>3</sup>	16		IO-3.5	06/03/2014 938	WN
Uranium	ND	µg/Filter	15		IO-3.5	04/14/2014 1355	MS
Uranium	ND	µg/m <sup>3</sup>	15		IO-3.5	06/03/2014 938	WN

These results apply only to the samples tested.

## RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	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
	X	Matrix Effect		

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager