

Appendix L. Drinking Water, Stream Water, and Sediment Samples

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Engineering/Remediation Resources Group, Inc. (ERRG)
Project Name : Blue Ledge Mine Removal
Project Number : NA
Sample Matrix : DRINKING WATER

Service Request : K1006877
Date Collected : 06/30/10
Date Received : 07/03-08/10

Sulfate

Analysis Method : 300.0
 Test Notes :

Units : mg/L
 Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BL-DW-12620-063010	K1006877-001	1.0	0.1	5	07/06/10	21.5	
BL-DW-462-063010	K1006877-002	2.0	0.1	10	07/06/10	35.5	
BL-DW-541-063010	K1006877-003	1.0	0.1	5	07/09/10	31.4	
BL-DW-461-063010	K1006877-004	0.40	0.02	2	07/09/10	8.23	
BL-DW-461-063010DUP	K1006877-005	0.40	0.02	2	07/09/10	8.15	
BL-DW-17607-063010	K1006877-006	0.40	0.02	2	07/09/10	19.7	
Method Blank	K1006877-MB	0.20	0.01	1	07/09/10	ND	
Method Blank	K1006877-MB	0.20	0.01	1	07/06/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Engineering/Remediation Resources Group, Inc. (ERRG)
Project Name : Blue Ledge Mine Removal
Project Number : NA
Sample Matrix : DRINKING WATER

Service Request : K1006877
Date Collected : 06/30/10
Date Received : 07/03-08/10

Alkalinity as CaCO₃, Total

Analysis Method : SM 2320 B
 Test Notes :

Units : mg/L
 Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BL-DW-12620-063010	K1006877-001	9.0	3.0	1	07/07/10	258	
BL-DW-462-063010	K1006877-002	9.0	3.0	1	07/07/10	176	
BL-DW-541-063010	K1006877-003	2.0	1.0	1	07/13/10	230	
BL-DW-461-063010	K1006877-004	2.0	1.0	1	07/13/10	136	
BL-DW-461-063010DUP	K1006877-005	2.0	1.0	1	07/13/10	134	
BL-DW-17607-063010	K1006877-006	2.0	1.0	1	07/13/10	230	
Method Blank	K1006877-MB	9.0	3.0	1	07/07/10	5.4	J
Method Blank	K1006877-MB	2.0	1.0	1	07/13/10	1.5	J

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Engineering/Remediation Resources Group, Inc. (ERRG)
Project Name : Blue Ledge Mine Removal
Project Number : NA
Sample Matrix : DRINKING WATER

Service Request : K1006877
Date Collected : 06/30/10
Date Received : 07/03-08/10

Solids, Total Dissolved

Analysis Method : SM 2540 C
 Test Notes :

Units : mg/L
 Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BL-DW-12620-063010	K1006877-001	10	10	1	07/06/10	345	
BL-DW-462-063010	K1006877-002	10	10	1	07/06/10	275	
BL-DW-541-063010	K1006877-003	10	10	1	07/08/10	302	
BL-DW-461-063010	K1006877-004	10	10	1	07/08/10	116	
BL-DW-461-063010DUP	K1006877-005	10	10	1	07/08/10	161	
BL-DW-17607-063010	K1006877-006	10	10	1	07/08/10	283	
Method Blank	K1006877-MB	5.0	5.0	1	07/06/10	ND	
Method Blank	K1006877-MB	5.0	5.0	1	07/08/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Engineering/Remediation Resources Group, Inc. (ERRG)
Project Name : Blue Ledge Mine Removal
Project Number : NA
Sample Matrix : DRINKING WATER

Service Request : K1006877
Date Collected : 06/30/10
Date Received : 07/03-08/10

Solids, Total Suspended (TSS)

Analysis Method : SM 2540 D
 Test Notes :

Units : mg/L
 Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BL-DW-12620-063010	K1006877-001	5.0	5.0	1	07/06/10	ND	
BL-DW-462-063010	K1006877-002	5.0	5.0	1	07/06/10	ND	
BL-DW-541-063010	K1006877-003	5.0	5.0	1	07/08/10	ND	
BL-DW-461-063010	K1006877-004	5.0	5.0	1	07/08/10	ND	
BL-DW-461-063010DUP	K1006877-005	5.0	5.0	1	07/08/10	ND	
BL-DW-17607-063010	K1006877-006	5.0	5.0	1	07/08/10	ND	
Method Blank	K1006877-MB	5.0	5.0	1	07/08/10	ND	
Method Blank	K1006877-MB	5.0	5.0	1	07/06/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Engineering/Remediation Resources Group, Inc. (ERRG)
Project: Blue Ledge Mine Removal
Sample Matrix: Drinking water

Service Request: K1006877
Date Collected: 06/30/10
Date Received: 07/03/10

Hardness as CaCO3

Prep Method: CLAA
 Analysis Method: 6010B/SM 2340B
 Test Notes:

Units: mg/L (ppm)
 Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
BL-DW-12620-063010	K1006877-001	0.4	1	07/27/10	07/28/10	259	
BL-DW-462-063010	K1006877-002	0.4	1	07/27/10	07/28/10	202	
BL-DW-541-063010	K1006877-003	0.4	1	07/27/10	07/28/10	247	
BL-DW-461-063010	K1006877-004	0.4	1	07/27/10	07/28/10	138	
BL-DW-461-063010DUP	K1006877-005	0.4	1	07/27/10	07/28/10	139	
BL-DW-17607-063010	K1006877-006	0.4	1	07/27/10	07/28/10	135	
Method Blank	K1006877-MB	0.4	1	07/27/10	07/28/10	ND	

METALS

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INORGANIC ANALYSIS DATA PACKAGE

Client: Engineering/Remediation Resource Service Request: K1006877
Project No.: NA Date Collected: 6/30/2010
Project Name: Blue Ledge Mine Removal Date Received: 7/3/2010
Matrix: WATER Units: ug/L
Basis: N/A

Sample Name: BL-DW-12620-063010 Lab Code: K1006877-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.5	1.0	07/27/10	07/29/10	5.4		
Cadmium	200.8	0.02	1.0	07/27/10	07/29/10	0.04		
Copper	200.8	0.1	1.0	07/27/10	07/29/10	1.0		
Iron	6010B	20.0	1.0	07/27/10	07/28/10	103		
Lead	200.8	0.02	1.0	07/27/10	07/29/10	0.12		
Zinc	200.8	0.5	1.0	07/27/10	07/29/10	24.8		

% Solids: 0.0

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Engineering/Remediation Resource Service Request: K1006877
Project No.: NA Date Collected: 6/30/2010
Project Name: Blue Ledge Mine Removal Date Received: 7/8/2010
Matrix: WATER Units: ug/L
Basis: N/A

Sample Name: BL-DW-461-063010

Lab Code: K1006877-004 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.5	1.0	07/27/10	07/29/10	0.5	U	
Cadmium	200.8	0.02	1.0	07/27/10	07/29/10	0.02	U	
Copper	200.8	0.1	1.0	07/27/10	07/29/10	1.0		
Iron	6010B	20.0	1.0	07/27/10	07/28/10	20.0	U	
Lead	200.8	0.02	1.0	07/27/10	07/29/10	0.03		
Zinc	200.8	0.5	1.0	07/27/10	07/29/10	4.5		

% Solids: 0.0

Comments:



CHAIN OF CUSTODY/DRINKING WATER

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

SR#: K1006877

PAGE 1 OF 1 COC # 001

Shaded Fields - Information required for all public systems submitting reports to WDOH

SYSTEM NAME		TYPE OF SYSTEM <input type="checkbox"/> PUBLIC <input type="checkbox"/> PRIVATE		NUMBER OF CONTAINERS Synthetic Organic Compounds (SOCs) <input type="checkbox"/> 515.1 Volatile Organics (VOCs) <input type="checkbox"/> 504.1 Disinfection By-Products <input type="checkbox"/> Chlorate <input type="checkbox"/> THMs IOCs WASHINGTON <input type="checkbox"/> HAA <input type="checkbox"/> TTHMs Group A & Optional <input type="checkbox"/> Bromate <input type="checkbox"/> IOCs Oregon Primary/Secondary <input type="checkbox"/> Group B Nitrites <input type="checkbox"/> Nitrites <input type="checkbox"/> pH Metals (Circle Below) <input checked="" type="checkbox"/> Lead/Copper <input type="checkbox"/> Microbiology <input checked="" type="checkbox"/> Hardness <input checked="" type="checkbox"/> EPA 6070/6020 Total Coliform <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> S-M23410 B Iron Bacteria <input type="checkbox"/> Sulfur Bacteria <input type="checkbox"/> Radionuclides <input type="checkbox"/> Gross Alpha <input type="checkbox"/> Gross Beta Radium <input type="checkbox"/> Radium 226 <input type="checkbox"/> Radium 228 Cowitz Co. Shared Well <input type="checkbox"/> Total Dissolved Solids <input checked="" type="checkbox"/> 542340C Alkalinity <input checked="" type="checkbox"/> 542340B Sulfate <input checked="" type="checkbox"/> 542340B EPA 300.0
PUBLIC SYSTEMS I.D. #		GROUP <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> OTHER		
SAMPLE TAKEN (circle one) Before / After / NA - Chemical Treatment		SAMPLE PURPOSE (circle one) Compliance / Investigative / Other		
PROJECT MANAGER <u>Brian Wetzsteon</u>				
ADDRESS <u>4585 Pacheco Blvd Suite 200</u>				
CITY <u>Martinez, CA 94553</u>		COUNTY		
PHONE # <u>925 969.0750</u>		FAX # <u>925 969.0751</u>		
SAMPLER'S SIGNATURE <u>[Signature]</u>				
SAMPLE I.D.	* SOURCE #	DATE COLLECTED	TIME COLLECTED	SPECIFIC LOCATION SAMPLE TAKEN
BL-DW-541-063010		6/30/10	9.45	Kitchen sink
* BL-DW-12620-063010			10.41	wellhouse facet
BL-DW-461-063010			11.07	hose bib at front of house
BL-DW-461-063010 DUPLICATE			11.07	hose bib at front of house
BL-DW-17607-063010			11.53	hose bib at front of house
* BL-DW-462-063010			12.23	hose bib in front yard
* BL-DW-462-063010 (75755)			12.23	hose bib in front yard

ADDITIONAL INFORMATION
Johan Ziems Res.
Ron James Res.
Dakota's Res.
Luke's Res.
Bridgett Nielson Res

Reporting Requirements
When results are ready please:
Fax Call Mail
Report to:
Brian Wetzsteon
Phone: 925.969-0750
Fax: 925.969-0751

INVOICE INFORMATION
P.O. # 2010 084
Bill To: Brian Wetzsteon
Copy of Report to:
Phone:
Fax:

Circle which metals are to be analyzed:
Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg
Dissolved Metals: Al (As) Sb Ba Be B Ca (Cd) Co Cr (Cu) (Fe) (Pb) Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V (Zn) Hg
SPECIAL INSTRUCTIONS/COMMENTS:
*For composited or blended samples, list all sources in "additional information" section.
Please contact Kim Jones (916.607.8863) with any questions
Analysis subcontracted to an outside laboratory. Shipping costs may be charged.

RELINQUISHED BY: Signature: <u>[Signature]</u> Date/Time: <u>7/2/10 11:00</u> Printed Name: <u>Kim Jones</u> Firm: <u>ERLQ</u>	RECEIVED BY: Signature: <u>[Signature]</u> Date/Time: <u>7-3-10 11:00</u> Printed Name: <u>Kim Jones</u> Firm: <u>ERLQ</u>	RELINQUISHED BY: Signature: <u>[Signature]</u> Date/Time: <u>7-7-10 16:00</u> Printed Name: <u>Kim Jones</u> Firm: <u>ERLQ</u>	RECEIVED BY: Signature: <u>[Signature]</u> Date/Time: <u>7-8-10 9:15</u> Printed Name: <u>Kim Jones</u> Firm: <u>ERLQ</u>
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* Did not receive on 7-3-10

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Monday, October 4, 2010

Kim Jones
Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

RE: Blue Ledge Mine / 2010-084

Enclosed are the results of analyses for work order A10I292, which was received by the laboratory on 9/22/2010 at 10:00:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
10/04/10 15:53

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BL-DW-462-092110	A10I292-01	Water	09/21/10 11:53	09/22/10 10:00
BL-DW-541-092110	A10I292-02	Water	09/21/10 12:07	09/22/10 10:00
BL-DW-17607-092110	A10I292-03	Water	09/21/10 12:16	09/22/10 10:00
BL-DW-17607-092110 Dup	A10I292-04	Water	09/21/10 12:16	09/22/10 10:00
BL-STR-JCECC-091910	A10I292-05	Water	09/19/10 10:00	09/22/10 10:00

Apex Laboratories



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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

ANALYTICAL SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-462-092110 (A10I292-01RE1)			Matrix: Water	Batch: 1009452				
Sulfate	58900	---	5000	ug/L	1	09/28/10 15:30	300.0/9056A	
BL-DW-541-092110 (A10I292-02)			Matrix: Water	Batch: 1009413				
Sulfate	21400	---	1000	ug/L	1	09/27/10 21:03	300.0/9056A	
BL-DW-17607-092110 (A10I292-03)			Matrix: Water	Batch: 1009413				
Sulfate	20900	---	1000	ug/L	1	09/27/10 20:43	300.0/9056A	
BL-DW-17607-092110 Dup (A10I292-04)			Matrix: Water	Batch: 1009413				
Sulfate	20900	---	1000	ug/L	1	09/27/10 20:22	300.0/9056A	
BL-STR-JCECC-091910 (A10I292-05)			Matrix: Water	Batch: 1009413				
Sulfate	24000	---	1000	ug/L	1	09/27/10 20:02	300.0/9056A	

Apex Laboratories



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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-462-092110 (A10I292-01)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	246	---	2.70	mg CaCO3/L	10	09/27/10 13:09	CALC	
Arsenic	ND	---	2.00	ug/L	1	09/23/10 17:45	EPA 6020 (Diss)	
Cadmium	ND	---	1.00	"	"	"	"	
Calcium	81700	---	1000	"	10	09/27/10 13:09	"	
Copper	6.77	---	4.00	"	1	09/23/10 17:45	"	
Lead	ND	---	1.00	"	"	"	"	
Magnesium	10300	---	50.0	"	"	"	"	
Zinc	21.9	---	4.00	"	"	"	"	
BL-DW-541-092110 (A10I292-02)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	265	---	4.56	mg CaCO3/L	10	09/27/10 13:24	CALC	
Arsenic	5.10	---	2.00	ug/L	1	09/23/10 17:54	EPA 6020 (Diss)	
Cadmium	ND	---	1.00	"	"	"	"	
Calcium	77500	---	1000	"	10	09/27/10 13:24	"	
Copper	4.77	---	4.00	"	1	09/23/10 17:54	"	
Lead	ND	---	1.00	"	"	"	"	
Magnesium	17500	---	500	"	10	09/27/10 13:24	"	
Zinc	228	---	4.00	"	1	09/23/10 17:54	"	
BL-DW-17607-092110 (A10I292-03)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	295	---	4.56	mg CaCO3/L	10	09/27/10 13:27	CALC	
Arsenic	ND	---	2.00	ug/L	1	09/23/10 17:57	EPA 6020 (Diss)	
Cadmium	ND	---	1.00	"	"	"	"	
Calcium	74300	---	1000	"	10	09/27/10 13:27	"	
Copper	ND	---	4.00	"	1	09/23/10 17:57	"	
Lead	ND	---	1.00	"	"	"	"	
Magnesium	26600	---	500	"	10	09/27/10 13:27	"	
Zinc	24.9	---	4.00	"	1	09/23/10 17:57	"	
BL-DW-17607-092110 Dup (A10I292-04)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	297	---	4.56	mg CaCO3/L	10	09/27/10 13:30	CALC	
Arsenic	ND	---	2.00	ug/L	1	09/23/10 18:00	EPA 6020 (Diss)	
Cadmium	ND	---	1.00	"	"	"	"	
Calcium	75500	---	1000	"	10	09/27/10 13:30	"	
Copper	ND	---	4.00	"	1	09/23/10 18:00	"	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-17607-092110 Dup (A10I292-04)			Matrix: Water		Batch: 1009374			
Lead	ND	---	1.00	ug/L	1	"	EPA 6020 (Diss)	
Magnesium	26300	---	500	"	10	09/27/10 13:30	"	
Zinc	10.5	---	4.00	"	1	09/23/10 18:00	"	
BL-STR-JCECC-091910 (A10I292-05)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	33.0	---	0.456	mg CaCO3/L	1	09/23/10 18:03	CALC	
Arsenic	ND	---	2.00	ug/L	"	"	EPA 6020 (Diss)	FILT
Cadmium	1.23	---	1.00	"	"	"	"	FILT
Calcium	10100	---	100	"	"	"	"	FILT
Copper	6.38	---	4.00	"	"	"	"	FILT
Lead	ND	---	1.00	"	"	"	"	FILT
Magnesium	1880	---	50.0	"	"	"	"	FILT
Zinc	81.9	---	4.00	"	"	"	"	FILT

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Darwin Thomas, Business Development Director

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4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

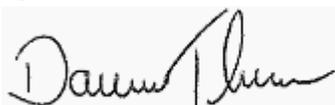
Reported:
10/04/10 15:53

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-462-092110 (A10I292-01)			Matrix: Water		Batch: 1009383			
Total Alkalinity	173	---	20.0	mg CaCO3/L	1	09/23/10 13:00	SM 2320 B	
Bicarbonate Alkalinity	173	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5000	ug/L	"	09/23/10 15:24	SM 2540 D	
Total Dissolved Solids	346000	---	10000	"	"	09/25/10 13:20	SM 2540 C	
BL-DW-541-092110 (A10I292-02)			Matrix: Water		Batch: 1009383			
Total Alkalinity	242	---	20.0	mg CaCO3/L	1	09/23/10 13:00	SM 2320 B	
Bicarbonate Alkalinity	242	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5000	ug/L	"	09/23/10 15:24	SM 2540 D	
Total Dissolved Solids	302000	---	10000	"	"	09/25/10 13:20	SM 2540 C	
BL-DW-17607-092110 (A10I292-03)			Matrix: Water		Batch: 1009383			
Total Alkalinity	274	---	20.0	mg CaCO3/L	1	09/23/10 13:00	SM 2320 B	
Bicarbonate Alkalinity	274	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5000	ug/L	"	09/23/10 15:24	SM 2540 D	
Total Dissolved Solids	345000	---	10000	"	"	09/25/10 14:40	SM 2540 C	
BL-DW-17607-092110 Dup (A10I292-04)			Matrix: Water		Batch: 1009383			
Total Alkalinity	271	---	20.0	mg CaCO3/L	1	09/23/10 13:00	SM 2320 B	
Bicarbonate Alkalinity	271	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5000	ug/L	"	09/23/10 15:24	SM 2540 D	
Total Dissolved Solids	336000	---	10000	"	"	09/25/10 13:20	SM 2540 C	
BL-STR-JCECC-091910 (A10I292-05)			Matrix: Water		Batch: 1009383			
Total Alkalinity	24.6	---	20.0	mg CaCO3/L	1	09/23/10 13:00	SM 2320 B	
Bicarbonate Alkalinity	24.6	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	221000	---	7140	ug/L	"	09/23/10 16:30	SM 2540 D	
Total Dissolved Solids	146000	---	14300	"	"	09/25/10 14:40	SM 2540 C	

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
10/04/10 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1009413 - Method Prep: Aq						Water						
Blank (1009413-BLK1)						Prepared: 09/24/10 13:36 Analyzed: 09/24/10 15:14						
300.0/9056A												
Sulfate	ND	---	1000	ug/L	1	---	---	---	---	---	---	
LCS (1009413-BS2)						Prepared: 09/24/10 13:36 Analyzed: 09/24/10 17:17						
300.0/9056A												
Sulfate	4000	---	1000	ug/L	1	4000	---	100	90-110%	---	---	
Duplicate (1009413-DUP1)						Prepared: 09/24/10 13:36 Analyzed: 09/27/10 18:20						
QC Source Sample: Other (A101324-06)												
300.0/9056A												
Sulfate	7560	---	1000	ug/L	1	---	7680	---	---	1	15%	
Matrix Spike (1009413-MS1)						Prepared: 09/24/10 13:36 Analyzed: 09/27/10 18:40						
QC Source Sample: Other (A101324-06)												
300.0/9056A												
Sulfate	12000	---	1110	ug/L	1	4440	7680	97	80-120%	---	---	
Batch 1009452 - Method Prep: Aq						Water						
Blank (1009452-BLK1)						Prepared: 09/28/10 12:56 Analyzed: 09/28/10 14:49						
300.0/9056A												
Sulfate	ND	---	1000	ug/L	1	---	---	---	---	---	---	
LCS (1009452-BS1)						Prepared: 09/28/10 12:56 Analyzed: 09/28/10 15:09						
300.0/9056A												
Sulfate	4040	---	1000	ug/L	1	4000	---	101	90-110%	---	---	
Duplicate (1009452-DUP1)						Prepared: 09/28/10 12:56 Analyzed: 09/28/10 15:50						
QC Source Sample: BL-DW-462-092110 (A101292-01RE1)												
300.0/9056A												
Sulfate	58200	---	5000	ug/L	1	---	58900	---	---	1	15%	
Matrix Spike (1009452-MS1)						Prepared: 09/28/10 12:56 Analyzed: 09/28/10 16:10						
QC Source Sample: BL-DW-462-092110 (A101292-01RE1)												
300.0/9056A												
Sulfate	79100	---	5000	ug/L	1	20000	58900	101	80-120%	---	---	

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

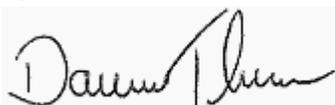
Reported:
10/04/10 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1009374 - EPA 3015A - Dissolved						Water						
Blank (1009374-BLK1)						Prepared: 09/23/10 10:32 Analyzed: 09/23/10 16:57						
EPA 6020 (Diss)												
Arsenic	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	---	1.00	"	"	---	---	---	---	---	---	
Calcium	ND	---	100	"	"	---	---	---	---	---	---	B-02
Copper	ND	---	4.00	"	"	---	---	---	---	---	---	
Lead	ND	---	1.00	"	"	---	---	---	---	---	---	
Magnesium	ND	---	50.0	"	"	---	---	---	---	---	---	
Zinc	ND	---	4.00	"	"	---	---	---	---	---	---	
LCS (1009374-BS1)						Prepared: 09/23/10 10:32 Analyzed: 09/23/10 17:00						
EPA 6020 (Diss)												
Arsenic	57.3	---	2.00	ug/L	1	55.6	---	103	80-120%	---	---	
Cadmium	54.4	---	1.00	"	"	"	---	98	"	---	---	
Calcium	5560	---	100	"	"	5560	---	100	"	---	---	
Copper	57.4	---	4.00	"	"	55.6	---	103	"	---	---	
Lead	50.8	---	1.00	"	"	"	---	91	"	---	---	
Magnesium	5840	---	50.0	"	"	5560	---	105	"	---	---	
Zinc	55.5	---	4.00	"	"	55.6	---	100	"	---	---	
Matrix Spike (1009374-MS1)						Prepared: 09/23/10 10:32 Analyzed: 09/23/10 17:48						
QC Source Sample: BL-DW-462-092110 (A10I292-01)												
EPA 6020 (Diss)												
Arsenic	58.4	---	2.00	ug/L	1	55.6	1.78	102	75-125%	---	---	
Cadmium	57.7	---	1.00	"	"	"	ND	104	"	---	---	
Copper	61.3	---	4.00	"	"	"	6.77	98	"	---	---	
Lead	50.4	---	1.00	"	"	"	0.333	90	"	---	---	
Zinc	74.6	---	4.00	"	"	"	21.9	95	"	---	---	
Matrix Spike (1009374-MS2)						Prepared: 09/23/10 10:32 Analyzed: 09/23/10 17:06						
QC Source Sample: Other (A10I242-01)												
EPA 6020 (Diss)												
Arsenic	58.9	---	2.00	ug/L	1	55.6	2.14	102	75-125%	---	---	
Cadmium	57.5	---	1.00	"	"	"	0.156	103	"	---	---	
Copper	57.0	---	4.00	"	"	"	1.03	101	"	---	---	
Lead	50.7	---	1.00	"	"	"	1.03	89	"	---	---	
Zinc	67.4	---	4.00	"	"	"	14.4	95	"	---	---	

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
10/04/10 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1009374 - EPA 3015A - Dissolved						Water						
Matrix Spike (1009374-MS3)						Prepared: 09/23/10 10:32 Analyzed: 09/27/10 13:12						
QC Source Sample: BL-DW-462-092110 (A101292-01)												
EPA 6020 (Diss)												
Calcium	85500	---	1000	ug/L	10	5560	81700	68	75-125%	---	---	Q-03, Q-16
Magnesium	17200	---	500	"	"	"	10300	124	"	---	---	
Matrix Spike (1009374-MS4)						Prepared: 09/23/10 10:32 Analyzed: 09/27/10 13:06						
QC Source Sample: Other (A101242-01)												
EPA 6020 (Diss)												
Calcium	71600	---	1000	ug/L	10	5560	66000	100	75-125%	---	---	Q-16
Magnesium	13400	---	500	"	"	"	6610	123	"	---	---	
Matrix Spike Dup (1009374-MSD1)						Prepared: 09/23/10 10:32 Analyzed: 09/23/10 17:51						
QC Source Sample: BL-DW-462-092110 (A101292-01)												
EPA 6020 (Diss)												
Arsenic	58.5	---	2.00	ug/L	1	55.6	1.78	102	75-125%	0.1	20%	
Cadmium	56.6	---	1.00	"	"	"	ND	102	"	2	20%	
Copper	61.4	---	4.00	"	"	"	6.77	98	"	0.2	20%	
Lead	49.8	---	1.00	"	"	"	0.333	89	"	1	20%	
Zinc	76.4	---	4.00	"	"	"	21.9	98	"	2	20%	
Matrix Spike Dup (1009374-MSD3)						Prepared: 09/23/10 10:32 Analyzed: 09/27/10 13:15						
QC Source Sample: BL-DW-462-092110 (A101292-01)												
EPA 6020 (Diss)												
Calcium	85300	---	1000	ug/L	10	5560	81700	66	75-125%	0.2	20%	Q-03, Q-16
Magnesium	17000	---	500	"	"	"	10300	120	"	1	20%	
Post Spike (1009374-PS1)						Prepared: 09/27/10 15:30 Analyzed: 09/27/10 15:44						
QC Source Sample: BL-DW-462-092110 (A101292-01)												
EPA 6020 (Diss)												
Calcium	113000	---		ug/L	20	47600	70000	91	75-125%	---		

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1009383 - Method Prep: Aq						Water						
Blank (1009383-BLK1)						Prepared: 09/23/10 11:47 Analyzed: 09/23/10 13:00						
SM 2320 B												
Total Alkalinity	ND	---	20.0	mg CaCO3/L	1	---	---	---	---	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
LCS (1009383-BS1)						Prepared: 09/23/10 11:47 Analyzed: 09/23/10 13:00						
SM 2320 B												
Total Alkalinity	240	---	20.0	mg CaCO3/L	1	236	---	102	85-115%	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	0.00100	---		0-200%	---	---	---
Carbonate Alkalinity	232	---	20.0	"	"	236	---	98	"	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	0.00100	---		"	---	---	---
Duplicate (1009383-DUP1)						Prepared: 09/23/10 11:47 Analyzed: 09/23/10 13:00						
QC Source Sample: BL-DW-462-092110 (A101292-01)												
SM 2320 B												
Total Alkalinity	176	---	20.0	mg CaCO3/L	1	---	173	---	---	1	20%	---
Bicarbonate Alkalinity	176	---	20.0	"	"	---	173	---	---	1	20%	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	---

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1009385 - Total Suspended Solids						Water						
Blank (1009385-BLK1)						Prepared: 09/23/10 14:00 Analyzed: 09/23/10 15:24						
SM 2540 D												
Total Suspended Solids	ND	---	5000	ug/L	1	---	---	---	---	---	---	---
Duplicate (1009385-DUP1)						Prepared: 09/23/10 14:00 Analyzed: 09/23/10 15:24						
QC Source Sample: BL-DW-462-092110 (A10I292-01)												
SM 2540 D												
Total Suspended Solids	ND	---	5000	ug/L	1	---	ND	---	---	---	20%	
Reference (1009385-SRM1)						Prepared: 09/23/10 14:00 Analyzed: 09/23/10 16:30						
SM 2540 D												
Total Suspended Solids	100	---		mg/L	1	96.6		104	90-110%	---	---	

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1009386 - Total Dissolved Solids						Water						
Blank (1009386-BLK1)						Prepared: 09/23/10 14:00 Analyzed: 09/25/10 11:30						
SM 2540 C												
Total Dissolved Solids	ND	---	10000	ug/L	1	---	---	---	---	---	---	---
Duplicate (1009386-DUP1)						Prepared: 09/23/10 14:00 Analyzed: 09/25/10 13:20						
QC Source Sample: BL-DW-462-092110 (A101292-01)												
SM 2540 C												
Total Dissolved Solids	306000	---	10000	ug/L	1	---	346000	---	---	12	20%	
Reference (1009386-SRM1)						Prepared: 09/23/10 14:00 Analyzed: 09/25/10 13:20						
SM 2540 C												
Total Dissolved Solids	1010	---		mg/L	1	970		104	85-115%	---	---	

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

SAMPLE PREPARATION INFORMATION

Anions by EPA 300.0/9056A (Ion Chromatography)

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1009413							
A10I292-02	Water	300.0/9056A	09/21/10 12:07	09/24/10 13:36	10mL/10mL	10mL/10mL	1.00
A10I292-03	Water	300.0/9056A	09/21/10 12:16	09/24/10 13:36	10mL/10mL	10mL/10mL	1.00
A10I292-04	Water	300.0/9056A	09/21/10 12:16	09/24/10 13:36	10mL/10mL	10mL/10mL	1.00
A10I292-05	Water	300.0/9056A	09/19/10 10:00	09/24/10 13:36	10mL/10mL	10mL/10mL	1.00
Batch: 1009452							
A10I292-01RE1	Water	300.0/9056A	09/21/10 11:53	09/28/10 12:56	2mL/10mL	10mL/10mL	5.00

Dissolved Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A - Dissolved

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1009374							
A10I292-01	Water	EPA 6020 (Diss)	09/21/10 11:53	09/23/10 10:32	45mL/50mL	45mL/50mL	1.00
A10I292-02	Water	EPA 6020 (Diss)	09/21/10 12:07	09/23/10 10:32	45mL/50mL	45mL/50mL	1.00
A10I292-03	Water	EPA 6020 (Diss)	09/21/10 12:16	09/23/10 10:32	45mL/50mL	45mL/50mL	1.00
A10I292-04	Water	EPA 6020 (Diss)	09/21/10 12:16	09/23/10 10:32	45mL/50mL	45mL/50mL	1.00
A10I292-05	Water	EPA 6020 (Diss)	09/19/10 10:00	09/23/10 10:32	45mL/50mL	45mL/50mL	1.00
Prep: Lab Filtration							
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1009365							
A10I292-05	Water	NA	09/19/10 10:00	09/22/10 13:29	50mL/50mL	50mL/50mL	NA

Conventional Chemistry Parameters

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1009383							
A10I292-01	Water	SM 2320 B	09/21/10 11:53	09/23/10 11:47	50mL/50mL	50mL/50mL	NA
A10I292-02	Water	SM 2320 B	09/21/10 12:07	09/23/10 11:47	50mL/50mL	50mL/50mL	NA
A10I292-03	Water	SM 2320 B	09/21/10 12:16	09/23/10 11:47	50mL/50mL	50mL/50mL	NA
A10I292-04	Water	SM 2320 B	09/21/10 12:16	09/23/10 11:47	50mL/50mL	50mL/50mL	NA
A10I292-05	Water	SM 2320 B	09/19/10 10:00	09/23/10 11:47	50mL/50mL	50mL/50mL	NA
Prep: Total Dissolved Solids							
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1009386							

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 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 10/04/10 15:53

SAMPLE PREPARATION INFORMATION

Conventional Chemistry Parameters

Prep: Total Dissolved Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A10I292-01	Water	SM 2540 C	09/21/10 11:53	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-02	Water	SM 2540 C	09/21/10 12:07	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-03	Water	SM 2540 C	09/21/10 12:16	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-04	Water	SM 2540 C	09/21/10 12:16	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-05	Water	SM 2540 C	09/19/10 10:00	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1009385							
A10I292-01	Water	SM 2540 D	09/21/10 11:53	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-02	Water	SM 2540 D	09/21/10 12:07	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-03	Water	SM 2540 D	09/21/10 12:16	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-04	Water	SM 2540 D	09/21/10 12:16	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA
A10I292-05	Water	SM 2540 D	09/19/10 10:00	09/23/10 14:00	1N/A/1N/A	1N/A/1mL	NA

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
10/04/10 15:53

Notes and Definitions

Qualifiers:

- B-02 Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- FILT Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.
- Q-03 Percent recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-16 Reanalysis of an original Batch QC sample.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
- Batch
QC In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories



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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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Wednesday, February 23, 2011

Kim Jones
Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

RE: Blue Ledge Mine / 2010-084

Enclosed are the results of analyses for work order A11A103, which was received by the laboratory on 1/13/2011 at 9:46:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
02/23/11 09:13

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BL-DW-462-011211	A11A103-01	Water	01/12/11 10:25	01/13/11 09:47
BL-DW-541-011211	A11A103-02	Water	01/12/11 10:40	01/13/11 09:47
BL-DW-541-011211 Dup	A11A103-03	Water	01/12/11 10:40	01/13/11 09:47
BL-DW-541-011211 MSMSD	A11A103-04	Water	01/12/11 10:40	01/13/11 09:47
BL-DW-17607-111211	A11A103-05	Water	01/12/11 10:59	01/13/11 09:47

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 02/23/11 09:13

ANALYTICAL SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-462-011211 (A11A103-01)			Matrix: Water	Batch: 1101164				
Sulfate	22.2	---	1.00	mg/L	1	01/14/11 15:25	300.0/9056A	
BL-DW-541-011211 (A11A103-02)			Matrix: Water	Batch: 1101164				
Sulfate	4.81	---	1.00	mg/L	1	01/14/11 15:46	300.0/9056A	
BL-DW-541-011211 Dup (A11A103-03)			Matrix: Water	Batch: 1101164				
Sulfate	4.84	---	1.00	mg/L	1	01/14/11 16:07	300.0/9056A	
BL-DW-541-011211 MSMSD (A11A103-04)			Matrix: Water	Batch: 1101164				
Sulfate	4.87	---	1.00	mg/L	1	01/14/11 16:48	300.0/9056A	
BL-DW-17607-111211 (A11A103-05)			Matrix: Water	Batch: 1101164				
Sulfate	31.0	---	1.00	mg/L	1	01/14/11 18:10	300.0/9056A	

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Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
02/23/11 09:13

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-462-011211 (A11A103-01)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	192	---	2.70	mg CaCO3/L	10	01/17/11 16:32	6020 Calc	
Arsenic	ND	---	2.00	ug/L	1	01/17/11 16:02	EPA 6020 (Diss)	
Cadmium	0.167	0.0400	0.100	"	"	"	"	
Calcium	61100	---	1000	"	10	01/17/11 16:32	"	
Copper	33.2	---	4.00	"	1	01/17/11 16:02	"	
Lead	ND	---	1.00	"	"	"	"	
Magnesium	9570	---	50.0	"	"	"	"	
Zinc	40.3	---	4.00	"	"	"	"	
BL-DW-541-011211 (A11A103-02)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	62.8	---	1.45	mg CaCO3/L	5	01/17/11 16:35	6020 Calc	
Arsenic	ND	---	2.00	ug/L	1	01/17/11 16:05	EPA 6020 (Diss)	
Cadmium	0.0667	0.0400	0.100	"	"	"	"	J
Calcium	13400	---	500	"	5	01/17/11 16:35	"	
Copper	ND	---	4.00	"	1	01/17/11 16:05	"	
Lead	ND	---	1.00	"	"	"	"	
Magnesium	7100	---	50.0	"	"	"	"	
Zinc	7.96	---	4.00	"	"	"	"	
BL-DW-541-011211 Dup (A11A103-03)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	63.3	---	1.45	mg CaCO3/L	5	01/17/11 16:38	6020 Calc	
Arsenic	ND	---	2.00	ug/L	1	01/17/11 16:08	EPA 6020 (Diss)	
Cadmium	0.0667	0.0400	0.100	"	"	"	"	J
Calcium	13500	---	500	"	5	01/17/11 16:38	"	
Copper	ND	---	4.00	"	1	01/17/11 16:08	"	
Lead	ND	---	1.00	"	"	"	"	
Magnesium	7170	---	50.0	"	"	"	"	
Zinc	6.31	---	4.00	"	"	"	"	
BL-DW-541-011211 MSMSD (A11A103-04)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	64.0	---	1.45	mg CaCO3/L	5	01/17/11 16:41	6020 Calc	
Arsenic	ND	---	2.00	ug/L	1	01/17/11 16:11	EPA 6020 (Diss)	
Cadmium	0.0778	0.0400	0.100	"	"	"	"	J
Calcium	13600	---	500	"	5	01/17/11 16:41	"	
Copper	ND	---	4.00	"	1	01/17/11 16:11	"	

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 Martinez, CA 94553

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 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 02/23/11 09:13

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-541-011211 MSMSD (A11A103-04)			Matrix: Water		Batch: 1101179			
Lead	ND	---	1.00	ug/L	1	"	EPA 6020 (Diss)	
Magnesium	7290	---	50.0	"	"	"	"	
Zinc	10.1	---	4.00	"	"	"	"	
BL-DW-17607-111211 (A11A103-05)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) -	232	---	2.70	mg CaCO3/L	10	01/17/11 16:52	6020 Calc	
Dissolved								
Arsenic	3.00	---	2.00	ug/L	1	01/17/11 16:27	EPA 6020 (Diss)	
Cadmium	0.500	0.0400	0.100	"	"	"	"	
Calcium	76600	---	1000	"	10	01/17/11 16:52	"	
Copper	6.84	---	4.00	"	1	01/17/11 16:27	"	
Lead	2.02	---	1.00	"	"	"	"	
Magnesium	9860	---	50.0	"	"	"	"	
Zinc	1730	---	40.0	"	10	01/17/11 16:52	"	

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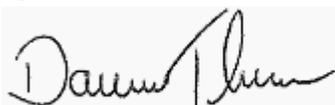
Reported:
 02/23/11 09:13

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-462-011211 (A11A103-01)			Matrix: Water		Batch: 1101181			
Total Suspended Solids	ND	---	5.00	mg/L	1	01/17/11 14:00	SM 2540 D	
Total Dissolved Solids	240	---	10.0	"	"	01/18/11 16:10	SM 2540 C	
Total Alkalinity	189	---	20.0	mg CaCO3/L	"	01/18/11 11:00	SM 2320 B	
Bicarbonate Alkalinity	189	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
BL-DW-541-011211 (A11A103-02)			Matrix: Water		Batch: 1101181			
Total Suspended Solids	ND	---	5.00	mg/L	1	01/17/11 14:00	SM 2540 D	
Total Dissolved Solids	81.0	---	10.0	"	"	01/18/11 16:10	SM 2540 C	
Total Alkalinity	51.0	---	20.0	mg CaCO3/L	"	01/18/11 11:00	SM 2320 B	
Bicarbonate Alkalinity	51.0	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
BL-DW-541-011211 Dup (A11A103-03)			Matrix: Water		Batch: 1101181			
Total Suspended Solids	ND	---	5.00	mg/L	1	01/17/11 14:00	SM 2540 D	
Total Dissolved Solids	81.0	---	10.0	"	"	01/18/11 16:10	SM 2540 C	
Total Alkalinity	66.2	---	20.0	mg CaCO3/L	"	01/18/11 11:00	SM 2320 B	
Bicarbonate Alkalinity	66.2	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
BL-DW-541-011211 MSMSD (A11A103-04)			Matrix: Water		Batch: 1101181			
Total Suspended Solids	ND	---	5.00	mg/L	1	01/17/11 14:00	SM 2540 D	
Total Dissolved Solids	79.0	---	10.0	"	"	01/18/11 16:10	SM 2540 C	
Total Alkalinity	65.4	---	20.0	mg CaCO3/L	"	01/18/11 11:00	SM 2320 B	
Bicarbonate Alkalinity	65.4	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
BL-DW-17607-111211 (A11A103-05)			Matrix: Water		Batch: 1101181			
Total Suspended Solids	ND	---	5.00	mg/L	1	01/17/11 14:00	SM 2540 D	
Total Dissolved Solids	266	---	10.0	"	"	01/18/11 16:10	SM 2540 C	
Total Alkalinity	220	---	20.0	mg CaCO3/L	"	01/18/11 11:00	SM 2320 B	
Bicarbonate Alkalinity	220	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	

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4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
02/23/11 09:13

QUALITY CONTROL (QC) SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101164 - Method Prep: Aq						Water						
Blank (1101164-BLK1)						Prepared: 01/14/11 13:28 Analyzed: 01/14/11 14:03						
300.0/9056A												
Sulfate	ND	---	1.00	mg/L	1	---	---	---	---	---	---	---
LCS (1101164-BS1)						Prepared: 01/14/11 13:28 Analyzed: 01/14/11 14:24						
300.0/9056A												
Sulfate	4.05	---	1.00	mg/L	1	4.00	---	101	90-110%	---	---	---
Duplicate (1101164-DUP1)						Prepared: 01/14/11 13:28 Analyzed: 01/14/11 16:27						
QC Source Sample: Other (A11A103-03)												
300.0/9056A												
Sulfate	4.83	---	1.00	mg/L	1	---	4.84	---	---	0.2	15%	---
Duplicate (1101164-DUP2)						Prepared: 01/14/11 13:28 Analyzed: 01/14/11 20:13						
QC Source Sample: Other (A11A040-01RE1)												
300.0/9056A												
Sulfate	337	---	100	mg/L	1	---	334	---	---	0.9	15%	---
Matrix Spike (1101164-MS1)						Prepared: 01/14/11 13:28 Analyzed: 01/14/11 17:08						
QC Source Sample: BL-DW-541-011211 MSMSD (A11A103-04)												
300.0/9056A												
Sulfate	9.23	---	1.11	mg/L	1	4.44	4.87	98	80-120%	---	---	---
Matrix Spike (1101164-MS2)						Prepared: 01/14/11 13:28 Analyzed: 01/14/11 20:33						
QC Source Sample: Other (A11A040-01RE1)												
300.0/9056A												
Sulfate	733	---	100	mg/L	1	400	334	100	80-120%	---	---	---

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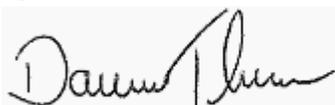
Reported:
 02/23/11 09:13

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101179 - EPA 3015A - Dissolved						Water						
Blank (1101179-BLK1)						Prepared: 01/17/11 09:26 Analyzed: 01/17/11 15:57						
EPA 6020 (Diss)												
Arsenic	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.0400	0.100	"	"	---	---	---	---	---	---	
Calcium	ND	---	100	"	"	---	---	---	---	---	---	
Copper	ND	---	4.00	"	"	---	---	---	---	---	---	
Lead	ND	---	1.00	"	"	---	---	---	---	---	---	
Magnesium	ND	---	50.0	"	"	---	---	---	---	---	---	
Zinc	ND	---	4.00	"	"	---	---	---	---	---	---	
LCS (1101179-BS1)						Prepared: 01/17/11 09:26 Analyzed: 01/17/11 16:00						
EPA 6020 (Diss)												
Arsenic	54.7	---	2.00	ug/L	1	55.6	---	98	80-120%	---	---	
Cadmium	55.7	0.0400	0.100	"	"	"	---	100	"	---	---	
Calcium	5550	---	100	"	"	5560	---	100	"	---	---	
Copper	57.1	---	4.00	"	"	55.6	---	103	"	---	---	
Lead	53.1	---	1.00	"	"	"	---	96	"	---	---	
Magnesium	5750	---	50.0	"	"	5560	---	103	"	---	---	
Zinc	53.7	---	4.00	"	"	55.6	---	97	"	---	---	
Matrix Spike (1101179-MS1)						Prepared: 01/17/11 09:26 Analyzed: 01/17/11 16:14						
QC Source Sample: BL-DW-541-011211 MSMSD (A11A103-04)												
EPA 6020 (Diss)												
Arsenic	54.9	---	2.00	ug/L	1	55.6	0.722	98	75-125%	---	---	
Cadmium	56.0	0.0400	0.100	"	"	"	0.0778	101	"	---	---	
Copper	61.0	---	4.00	"	"	"	3.68	103	"	---	---	
Lead	53.6	---	1.00	"	"	"	ND	97	"	---	---	
Zinc	64.7	---	4.00	"	"	"	10.1	98	"	---	---	
Matrix Spike (1101179-MS2)						Prepared: 01/17/11 09:26 Analyzed: 01/17/11 16:44						
QC Source Sample: BL-DW-541-011211 MSMSD (A11A103-04)												
EPA 6020 (Diss)												
Calcium	18800	---	500	ug/L	5	5560	13600	93	75-125%	---	---	Q-16
Magnesium	12900	---	250	"	"	"	7290	101	"	---	---	Q-16
Matrix Spike Dup (1101179-MSD1)						Prepared: 01/17/11 09:26 Analyzed: 01/17/11 16:23						
QC Source Sample: BL-DW-541-011211 MSMSD (A11A103-04)												

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Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 02/23/11 09:13

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101179 - EPA 3015A - Dissolved						Water						
Matrix Spike Dup (1101179-MSD1)						Prepared: 01/17/11 09:26 Analyzed: 01/17/11 16:23						
QC Source Sample: BL-DW-541-011211 MSMSD (A11A103-04)												
EPA 6020 (Diss)												
Arsenic	55.6	---	2.00	ug/L	1	55.6	0.722	99	75-125%	1	20%	
Cadmium	56.1	0.0400	0.100	"	"	"	0.0778	101	"	0.2	20%	
Copper	60.4	---	4.00	"	"	"	3.68	102	"	1	20%	
Lead	53.1	---	1.00	"	"	"	ND	96	"	1	20%	
Zinc	64.2	---	4.00	"	"	"	10.1	97	"	0.8	20%	

Matrix Spike Dup (1101179-MSD2)

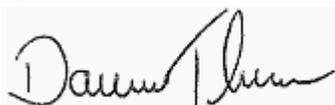
Prepared: 01/17/11 09:26 Analyzed: 01/17/11 16:47

QC Source Sample: BL-DW-541-011211 MSMSD (A11A103-04)

EPA 6020 (Diss)

Calcium	19200	---	500	ug/L	5	5560	13600	100	75-125%	2	20%	Q-16
Magnesium	13200	---	250	"	"	"	7290	106	"	2	20%	Q-16

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Project: **Blue Ledge Mine**
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Reported:
 02/23/11 09:13

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101181 - Total Suspended Solids						Water						
Blank (1101181-BLK1)						Prepared: 01/17/11 09:48 Analyzed: 01/17/11 14:00						
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	---
Duplicate (1101181-DUP1)						Prepared: 01/17/11 09:48 Analyzed: 01/17/11 14:00						
QC Source Sample: BL-DW-462-011211 (A11A103-01)												
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	20%	
Duplicate (1101181-DUP2)						Prepared: 01/17/11 09:48 Analyzed: 01/17/11 15:40						
QC Source Sample: Other (A11A095-01)												
SM 2540 D												
Total Suspended Solids	60.0	---	5.00	mg/L	1	---	60.0	---	---	0	20%	
Reference (1101181-SRM1)						Prepared: 01/17/11 09:48 Analyzed: 01/17/11 15:40						
SM 2540 D												
Total Suspended Solids	96.0	---		mg/L	1	96.6		99	90-110%	---	---	

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Project: **Blue Ledge Mine**
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 02/23/11 09:13

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101182 - Total Dissolved Solids						Water						
Blank (1101182-BLK1)						Prepared: 01/17/11 09:51 Analyzed: 01/18/11 16:10						
SM 2540 C												
Total Dissolved Solids	ND	---	10.0	mg/L	1	---	---	---	---	---	---	---
Duplicate (1101182-DUP1)						Prepared: 01/17/11 09:51 Analyzed: 01/18/11 16:10						
QC Source Sample: BL-DW-462-011211 (A11A103-01)												
SM 2540 C												
Total Dissolved Solids	230	---	10.0	mg/L	1	---	240	---	---	4	20%	
Reference (1101182-SRM1)						Prepared: 01/17/11 09:51 Analyzed: 01/18/11 16:10						
SM 2540 C												
Total Dissolved Solids	984	---		mg/L	1	970		101	90-110%	---	---	

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 Project Manager: Kim Jones

Reported:
 02/23/11 09:13

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101200 - Method Prep: Aq						Water						
Blank (1101200-BLK1)						Prepared: 01/18/11 09:58 Analyzed: 01/18/11 11:00						
SM 2320 B												
Total Alkalinity	ND	---	20.0	mg CaCO3/L	1	---	---	---	---	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
LCS (1101200-BS1)						Prepared: 01/18/11 09:58 Analyzed: 01/18/11 11:00						
SM 2320 B												
Total Alkalinity	241	---	20.0	mg CaCO3/L	1	236	---	102	85-115%	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	0.00100	---		0-200%	---	---	---
Carbonate Alkalinity	228	---	20.0	"	"	236	---	97	"	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	0.00100	---		"	---	---	---
Duplicate (1101200-DUP1)						Prepared: 01/18/11 09:58 Analyzed: 01/18/11 11:00						
QC Source Sample: BL-DW-462-011211 (A11A103-01)												
SM 2320 B												
Total Alkalinity	188	---	20.0	mg CaCO3/L	1	---	189	---	---	1	20%	---
Bicarbonate Alkalinity	188	---	20.0	"	"	---	189	---	---	1	20%	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	---

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
02/23/11 09:13

SAMPLE PREPARATION INFORMATION

Anions by EPA 300.0/9056A (Ion Chromatography)

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1101164							
A11A103-01	Water	300.0/9056A	01/12/11 10:25	01/14/11 13:28	10mL/10mL	10mL/10mL	1.00
A11A103-02	Water	300.0/9056A	01/12/11 10:40	01/14/11 13:28	10mL/10mL	10mL/10mL	1.00
A11A103-03	Water	300.0/9056A	01/12/11 10:40	01/14/11 13:28	10mL/10mL	10mL/10mL	1.00
A11A103-04	Water	300.0/9056A	01/12/11 10:40	01/14/11 13:28	10mL/10mL	10mL/10mL	1.00
A11A103-05	Water	300.0/9056A	01/12/11 10:59	01/14/11 13:28	10mL/10mL	10mL/10mL	1.00

Dissolved Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A - Dissolved

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1101179							
A11A103-01	Water	EPA 6020 (Diss)	01/12/11 10:25	01/17/11 09:26	45mL/50mL	45mL/50mL	1.00
A11A103-02	Water	EPA 6020 (Diss)	01/12/11 10:40	01/17/11 09:26	45mL/50mL	45mL/50mL	1.00
A11A103-03	Water	EPA 6020 (Diss)	01/12/11 10:40	01/17/11 09:26	45mL/50mL	45mL/50mL	1.00
A11A103-04	Water	EPA 6020 (Diss)	01/12/11 10:40	01/17/11 09:26	45mL/50mL	45mL/50mL	1.00
A11A103-05	Water	EPA 6020 (Diss)	01/12/11 10:59	01/17/11 09:26	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1101200							
A11A103-01	Water	SM 2320 B	01/12/11 10:25	01/18/11 09:58	50mL/50mL	50mL/50mL	NA
A11A103-02	Water	SM 2320 B	01/12/11 10:40	01/18/11 09:58	50mL/50mL	50mL/50mL	NA
A11A103-03	Water	SM 2320 B	01/12/11 10:40	01/18/11 09:58	50mL/50mL	50mL/50mL	NA
A11A103-04	Water	SM 2320 B	01/12/11 10:40	01/18/11 09:58	50mL/50mL	50mL/50mL	NA
A11A103-05	Water	SM 2320 B	01/12/11 10:59	01/18/11 09:58	50mL/50mL	50mL/50mL	NA

Prep: Total Dissolved Solids

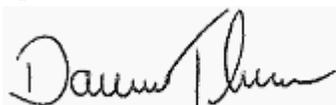
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1101182							
A11A103-01	Water	SM 2540 C	01/12/11 10:25	01/17/11 09:51	1N/A/1N/A	1N/A/1mL	NA
A11A103-02	Water	SM 2540 C	01/12/11 10:40	01/17/11 09:51	1N/A/1N/A	1N/A/1mL	NA
A11A103-03	Water	SM 2540 C	01/12/11 10:40	01/17/11 09:51	1N/A/1N/A	1N/A/1mL	NA
A11A103-04	Water	SM 2540 C	01/12/11 10:40	01/17/11 09:51	1N/A/1N/A	1N/A/1mL	NA
A11A103-05	Water	SM 2540 C	01/12/11 10:59	01/17/11 09:51	1N/A/1N/A	1N/A/1mL	NA

Prep: Total Suspended Solids

Sample	Default	RL Prep
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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 02/23/11 09:13

SAMPLE PREPARATION INFORMATION

Conventional Chemistry Parameters

Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1101181							
A11A103-01	Water	SM 2540 D	01/12/11 10:25	01/17/11 09:48	1N/A/1N/A	1N/A/1mL	NA
A11A103-02	Water	SM 2540 D	01/12/11 10:40	01/17/11 09:48	1N/A/1N/A	1N/A/1mL	NA
A11A103-03	Water	SM 2540 D	01/12/11 10:40	01/17/11 09:48	1N/A/1N/A	1N/A/1mL	NA
A11A103-04	Water	SM 2540 D	01/12/11 10:40	01/17/11 09:48	1N/A/1N/A	1N/A/1mL	NA
A11A103-05	Water	SM 2540 D	01/12/11 10:59	01/17/11 09:48	1N/A/1N/A	1N/A/1mL	NA

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4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
02/23/11 09:13

Notes and Definitions

Qualifiers:

- J Estimated Result . Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-16 Reanalysis of an original Batch QC sample.

Notes and Conventions:

- DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD Relative Percent Difference
MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
- Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.
- For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.
- Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- *** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, July 22, 2011

Kim Jones
Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

RE: Blue Ledge Mine / 2010-084

Enclosed are the results of analyses for work order A11G163, which was received by the laboratory on 7/14/2011 at 9:12:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
07/22/11 06:11

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BL-DW-541-071311	A11G163-01	Water	07/13/11 09:31	07/14/11 09:12
BL-DW-17607-071311	A11G163-02	Water	07/13/11 09:43	07/14/11 09:12
BL-DW-462-071311	A11G163-03	Water	07/13/11 10:30	07/14/11 09:12
BL-DW-462-071311 DUP	A11G163-04	Water	07/13/11 10:32	07/14/11 09:12
BL-DW-12620-071311	A11G163-05	Water	07/13/11 10:43	07/14/11 09:12
BL-DW-12620-071311 MSMSD	A11G163-06	Water	07/13/11 10:57	07/14/11 09:12

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

ANALYTICAL SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-541-071311 (A11G163-01)			Matrix: Water	Batch: 1107190				
Sulfate	22.6	---	1.00	mg/L	1	07/14/11 15:50	300.0/9056A	
BL-DW-17607-071311 (A11G163-02)			Matrix: Water	Batch: 1107190				
Sulfate	17.9	---	1.00	mg/L	1	07/14/11 16:10	300.0/9056A	
BL-DW-462-071311 (A11G163-03RE1)			Matrix: Water	Batch: 1107190				
Sulfate	42.6	---	2.00	mg/L	2	07/14/11 19:55	300.0/9056A	
BL-DW-462-071311 DUP (A11G163-04RE1)			Matrix: Water	Batch: 1107190				
Sulfate	42.6	---	2.00	mg/L	2	07/14/11 20:15	300.0/9056A	
BL-DW-12620-071311 (A11G163-05)			Matrix: Water	Batch: 1107190				
Sulfate	24.9	---	1.00	mg/L	1	07/14/11 17:11	300.0/9056A	
BL-DW-12620-071311 MSMSD (A11G163-06)			Matrix: Water	Batch: 1107190				
Sulfate	24.9	---	1.00	mg/L	1	07/14/11 17:32	300.0/9056A	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-541-071311 (A11G163-01)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	243	---	4.56	mg CaCO3/L	10	07/20/11 17:53	6020 Calc	
Arsenic	0.00584	---	0.00200	mg/L	1	07/19/11 13:35	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000100	"	"	"	"	FILT1
Calcium	70.7	---	1.00	"	10	07/20/11 17:53	"	
Copper	0.00897	---	0.00400	"	1	07/19/11 13:35	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	16.1	---	0.500	"	10	07/19/11 13:41	"	FILT1
Zinc	0.0476	---	0.00400	"	1	07/19/11 13:35	"	FILT1
BL-DW-17607-071311 (A11G163-02)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	238	---	4.56	mg CaCO3/L	10	07/20/11 17:56	6020 Calc	
Arsenic	ND	---	0.00200	mg/L	1	07/19/11 12:18	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000100	"	"	"	"	FILT1
Calcium	60.1	---	1.00	"	10	07/20/11 17:56	"	
Copper	ND	---	0.00400	"	1	07/19/11 12:18	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	21.4	---	0.500	"	10	07/19/11 13:45	"	FILT1
Zinc	0.00754	---	0.00400	"	1	07/19/11 12:18	"	FILT1
BL-DW-462-071311 (A11G163-03)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	200	---	2.70	mg CaCO3/L	10	07/20/11 17:59	6020 Calc	
Arsenic	ND	---	0.00200	mg/L	1	07/19/11 12:21	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000100	"	"	"	"	FILT1
Calcium	63.6	---	1.00	"	10	07/20/11 17:59	"	
Copper	0.0189	---	0.00400	"	1	07/19/11 12:21	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	9.87	---	0.0500	"	"	"	"	FILT1
Zinc	0.0263	---	0.00400	"	"	"	"	FILT1
BL-DW-462-071311 DUP (A11G163-04)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	200	---	2.70	mg CaCO3/L	10	07/20/11 18:02	6020 Calc	
Arsenic	ND	---	0.00200	mg/L	1	07/19/11 12:24	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000100	"	"	"	"	FILT1
Calcium	63.6	---	1.00	"	10	07/20/11 18:02	"	
Copper	0.0129	---	0.00400	"	1	07/19/11 12:24	"	FILT1

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-462-071311 DUP (A11G163-04)			Matrix: Water		Batch: 1107236			
Lead	ND	---	0.00100	mg/L	1	"	EPA 6020 (Diss)	FILT1
Magnesium	9.98	---	0.0500	"	"	"	"	FILT1
Zinc	0.0154	---	0.00400	"	"	"	"	FILT1
BL-DW-12620-071311 (A11G163-05)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) -	260	---	4.56	mg CaCO3/L	10	07/20/11 18:05	6020 Calc	
Dissolved Arsenic	0.00412	---	0.00200	mg/L	1	07/19/11 12:28	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000100	"	"	"	"	FILT1
Calcium	84.8	---	1.00	"	10	07/20/11 18:05	"	
Copper	0.0217	---	0.00400	"	1	07/19/11 12:28	"	FILT1
Lead	0.00146	---	0.00100	"	"	"	"	FILT1
Magnesium	11.7	---	0.500	"	10	07/19/11 13:54	"	FILT1
Zinc	0.109	---	0.00400	"	1	07/19/11 12:28	"	FILT1
BL-DW-12620-071311 MSMSD (A11G163-06)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) -	258	---	4.56	mg CaCO3/L	10	07/20/11 18:08	6020 Calc	
Dissolved Arsenic	0.00437	---	0.00200	mg/L	1	07/19/11 12:31	EPA 6020 (Diss)	FILT1
Cadmium	0.000133	---	0.000100	"	"	"	"	FILT1
Calcium	83.6	---	1.00	"	10	07/20/11 18:08	"	PS-01
Copper	0.0222	---	0.00400	"	1	07/19/11 12:31	"	FILT1
Lead	0.00113	---	0.00100	"	"	"	"	FILT1
Magnesium	12.0	---	0.500	"	10	07/19/11 13:57	"	FILT1
Zinc	0.191	---	0.00400	"	1	07/19/11 12:31	"	FILT1

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

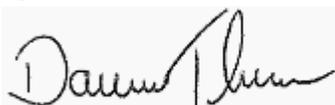
Reported:
07/22/11 06:11

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-541-071311 (A11G163-01)			Matrix: Water		Batch: 1107185			
Total Alkalinity	244	---	20.0	mg CaCO3/L	1	07/14/11 14:00	SM 2320 B	
Bicarbonate Alkalinity	244	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	07/18/11 13:50	SM 2540 D	
Total Dissolved Solids	283	---	10.0	"	"	07/19/11 13:50	SM 2540 C	
BL-DW-17607-071311 (A11G163-02)			Matrix: Water		Batch: 1107185			
Total Alkalinity	243	---	20.0	mg CaCO3/L	1	07/14/11 14:00	SM 2320 B	
Bicarbonate Alkalinity	243	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	07/18/11 13:50	SM 2540 D	
Total Dissolved Solids	268	---	10.0	"	"	07/19/11 13:50	SM 2540 C	
BL-DW-462-071311 (A11G163-03)			Matrix: Water		Batch: 1107185			
Total Alkalinity	174	---	20.0	mg CaCO3/L	1	07/14/11 14:00	SM 2320 B	
Bicarbonate Alkalinity	174	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	07/18/11 13:50	SM 2540 D	
Total Dissolved Solids	283	---	10.0	"	"	07/19/11 13:50	SM 2540 C	
BL-DW-462-071311 DUP (A11G163-04)			Matrix: Water		Batch: 1107185			
Total Alkalinity	180	---	20.0	mg CaCO3/L	1	07/14/11 14:00	SM 2320 B	
Bicarbonate Alkalinity	180	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	07/18/11 13:50	SM 2540 D	
Total Dissolved Solids	286	---	10.0	"	"	07/19/11 13:50	SM 2540 C	
BL-DW-12620-071311 (A11G163-05)			Matrix: Water		Batch: 1107185			
Total Alkalinity	255	---	20.0	mg CaCO3/L	1	07/14/11 14:00	SM 2320 B	
Bicarbonate Alkalinity	255	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	07/18/11 13:50	SM 2540 D	
Total Dissolved Solids	308	---	10.0	"	"	07/19/11 13:50	SM 2540 C	

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Darwin Thomas, Business Development Director

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 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

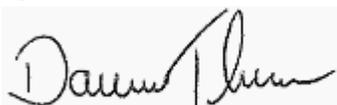
Reported:
 07/22/11 06:11

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-DW-12620-071311 MSMSD (A11G163-06)			Matrix: Water		Batch: 1107185			
Total Alkalinity	256	---	20.0	mg CaCO3/L	1	07/14/11 14:00	SM 2320 B	
Bicarbonate Alkalinity	256	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	07/18/11 13:50	SM 2540 D	
Total Dissolved Solids	311	---	10.0	"	"	07/19/11 13:50	SM 2540 C	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

QUALITY CONTROL (QC) SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1107190 - Method Prep: Aq						Water						
Blank (1107190-BLK1)						Prepared: 07/14/11 14:01 Analyzed: 07/14/11 15:09						
300.0/9056A												
Sulfate	ND	---	1.00	mg/L	1	---	---	---	---	---	---	---
LCS (1107190-BS1)						Prepared: 07/14/11 14:01 Analyzed: 07/14/11 15:29						
300.0/9056A												
Sulfate	3.85	---	1.00	mg/L	1	4.00	---	96	90-110%	---	---	---
Duplicate (1107190-DUP1)						Prepared: 07/14/11 14:01 Analyzed: 07/14/11 17:52						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
300.0/9056A												
Sulfate	24.9	---	1.00	mg/L	1	---	24.9	---	---	0.01	15%	---
Matrix Spike (1107190-MS1)						Prepared: 07/14/11 14:01 Analyzed: 07/14/11 18:13						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
300.0/9056A												
Sulfate	29.1	---	1.11	mg/L	1	4.44	24.9	95	80-120%	---	---	---

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Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

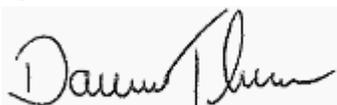
Reported:
07/22/11 06:11

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1107236 - EPA 3015A - Dissolved						Water						
Blank (1107236-BLK1)						Prepared: 07/19/11 08:16 Analyzed: 07/19/11 12:04						
EPA 6020 (Diss)												
Arsenic	ND	---	0.00200	mg/L	1	---	---	---	---	---	---	FILT1, A-01
Cadmium	ND	---	0.000100	"	"	---	---	---	---	---	---	A-01, FILT1
Calcium	ND	---	0.100	"	"	---	---	---	---	---	---	FILT1, A-01
Copper	ND	---	0.00400	"	"	---	---	---	---	---	---	FILT1, A-01
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	FILT1, A-01
Magnesium	ND	---	0.0500	"	"	---	---	---	---	---	---	FILT1, A-01
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	FILT1, A-01
Blank (1107236-BLK2)						Prepared: 07/19/11 08:16 Analyzed: 07/19/11 12:07						
EPA 6020 (Diss)												
Arsenic	ND	---	0.00200	mg/L	1	---	---	---	---	---	---	A-02, FILT1
Cadmium	ND	---	0.000100	"	"	---	---	---	---	---	---	A-02, FILT1
Calcium	ND	---	0.100	"	"	---	---	---	---	---	---	A-02, FILT1
Copper	ND	---	0.00400	"	"	---	---	---	---	---	---	A-02, FILT1
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	02, B-02, FILT1
Magnesium	ND	---	0.0500	"	"	---	---	---	---	---	---	A-02, FILT1
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	A-02, FILT1
LCS (1107236-BS1)						Prepared: 07/19/11 08:16 Analyzed: 07/19/11 12:10						
EPA 6020 (Diss)												
Arsenic	0.0553	---	0.00200	mg/L	1	0.0556	---	100	80-120%	---	---	
Cadmium	0.0555	---	0.000100	"	"	"	---	100	"	---	---	
Calcium	5.42	---	0.100	"	"	5.56	---	98	"	---	---	
Copper	0.0559	---	0.00400	"	"	0.0556	---	101	"	---	---	
Lead	0.0552	---	0.00100	"	"	"	---	99	"	---	---	
Magnesium	5.45	---	0.0500	"	"	5.56	---	98	"	---	---	
Zinc	0.0548	---	0.00400	"	"	0.0556	---	99	"	---	---	
Duplicate (1107236-DUP1)						Prepared: 07/19/11 08:16 Analyzed: 07/19/11 12:34						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
EPA 6020 (Diss)												
Arsenic	0.00419	---	0.00200	mg/L	1	---	0.00437	---	---	4	20%	
Cadmium	0.000122	---	0.000100	"	"	---	0.000133	---	---	9	20%	
Copper	0.0214	---	0.00400	"	"	---	0.0222	---	---	3	20%	
Lead	0.00110	---	0.00100	"	"	---	0.00113	---	---	3	20%	

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
07/22/11 06:11

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1107236 - EPA 3015A - Dissolved						Water						
Duplicate (1107236-DUP1)						Prepared: 07/19/11 08:16 Analyzed: 07/19/11 12:34						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
Zinc	0.189	---	0.00400	mg/L	"	---	0.191	---	---	1	20%	
Duplicate (1107236-DUP2)						Prepared: 07/19/11 08:16 Analyzed: 07/19/11 13:59						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
EPA 6020 (Diss)												
Magnesium	11.4	---	0.500	mg/L	10	---	12.0	---	---	5	20%	Q-16
Duplicate (1107236-DUP3)						Prepared: 07/19/11 08:16 Analyzed: 07/20/11 18:11						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
EPA 6020 (Diss)												
Calcium	82.2	---	1.00	mg/L	10	---	83.6	---	---	2	20%	Q-16
Matrix Spike (1107236-MS1)						Prepared: 07/19/11 08:16 Analyzed: 07/19/11 12:45						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
EPA 6020 (Diss)												
Arsenic	0.0602	---	0.0200	mg/L	10	0.0556	0.00437	101	75-125%	---	---	
Cadmium	0.0562	---	0.00100	"	"	"	0.000133	101	"	---	---	
Copper	0.0797	---	0.0400	"	"	"	0.0222	103	"	---	---	
Lead	0.0566	---	0.0100	"	"	"	0.00113	100	"	---	---	
Magnesium	17.3	---	0.500	"	"	5.56	12.0	95	"	---	---	
Zinc	0.252	---	0.0400	"	"	0.0556	0.191	110	"	---	---	
Matrix Spike (1107236-MS2)						Prepared: 07/19/11 08:16 Analyzed: 07/20/11 18:14						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
EPA 6020 (Diss)												
Calcium	91.1	---	1.00	mg/L	10	5.56	83.6	136	75-125%	---	---	.01, Q-03, Q-16
Post Spike (1107236-PS1)						Prepared: 07/19/11 14:07 Analyzed: 07/21/11 14:04						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
EPA 6020 (Diss)												
Calcium	39700	---		ug/L	5	25000	15000	98	80-120%		---	

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1107185 - Method Prep: Aq						Water						
Blank (1107185-BLK1)						Prepared: 07/14/11 10:00 Analyzed: 07/14/11 11:15						
SM 2320 B												
Total Alkalinity	ND	---	20.0	mg CaCO3/L	1	---	---	---	---	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
LCS (1107185-BS1)						Prepared: 07/14/11 10:00 Analyzed: 07/14/11 11:15						
SM 2320 B												
Total Alkalinity	189	---	20.0	mg CaCO3/L	1	191	---	99	85-115%	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	0.000100	---		0-200%	---	---	---
Carbonate Alkalinity	187	---	20.0	"	"	191	---	98	"	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	0.000100	---		"	---	---	---
LCS (1107185-BS2)						Prepared: 07/14/11 10:00 Analyzed: 07/14/11 11:15						
SM 2320 B												
Total Alkalinity	186	---	20.0	mg CaCO3/L	1	191	---	97	85-115%	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	0.000100	---		0-200%	---	---	---
Carbonate Alkalinity	178	---	20.0	"	"	191	---	93	"	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	0.000100	---		"	---	---	---
Duplicate (1107185-DUP1)						Prepared: 07/14/11 10:00 Analyzed: 07/14/11 14:00						
QC Source Sample: BL-DW-12620-071311 MSMSD (A11G163-06)												
SM 2320 B												
Total Alkalinity	258	---	20.0	mg CaCO3/L	1	---	256	---	---	1	20%	---
Bicarbonate Alkalinity	258	---	20.0	"	"	---	256	---	---	1	20%	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	---

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

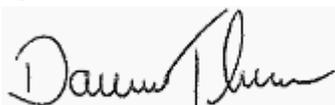
Reported:
 07/22/11 06:11

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1107223 - Total Suspended Solids						Water						
Blank (1107223-BLK1)						Prepared: 07/18/11 12:35 Analyzed: 07/18/11 13:50						
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	---
Duplicate (1107223-DUP1)						Prepared: 07/18/11 12:35 Analyzed: 07/18/11 13:50						
QC Source Sample: BL-DW-541-071311 (A11G163-01)												
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	---	20%
Reference (1107223-SRM1)						Prepared: 07/18/11 12:35 Analyzed: 07/18/11 13:50						
SM 2540 D												
Total Suspended Solids	93.0	---		mg/L	1	96.6		96	90-110%	---	---	

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1107224 - Total Dissolved Solids						Water						
Blank (1107224-BLK1)						Prepared: 07/18/11 12:35 Analyzed: 07/19/11 13:50						
SM 2540 C												
Total Dissolved Solids	ND	---	10.0	mg/L	1	---	---	---	---	---	---	---
Duplicate (1107224-DUP1)						Prepared: 07/18/11 12:35 Analyzed: 07/19/11 13:50						
QC Source Sample: BL-DW-541-071311 (A11G163-01)												
SM 2540 C												
Total Dissolved Solids	285	---	10.0	mg/L	1	---	283	---	---	0.7	20%	
Reference (1107224-SRM1)						Prepared: 07/18/11 12:35 Analyzed: 07/19/11 13:50						
SM 2540 C												
Total Dissolved Solids	997	---		mg/L	1	970		103	85-115%	---	---	

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Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

SAMPLE PREPARATION INFORMATION

Anions by EPA 300.0/9056A (Ion Chromatography)

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1107190							
A11G163-01	Water	300.0/9056A	07/13/11 09:31	07/14/11 14:01	10mL/10mL	10mL/10mL	1.00
A11G163-02	Water	300.0/9056A	07/13/11 09:43	07/14/11 14:01	10mL/10mL	10mL/10mL	1.00
A11G163-03RE1	Water	300.0/9056A	07/13/11 10:30	07/14/11 14:01	10mL/10mL	10mL/10mL	1.00
A11G163-04RE1	Water	300.0/9056A	07/13/11 10:32	07/14/11 14:01	10mL/10mL	10mL/10mL	1.00
A11G163-05	Water	300.0/9056A	07/13/11 10:43	07/14/11 14:01	10mL/10mL	10mL/10mL	1.00
A11G163-06	Water	300.0/9056A	07/13/11 10:57	07/14/11 14:01	10mL/10mL	10mL/10mL	1.00

Dissolved Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A - Dissolved

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1107236							
A11G163-01	Water	EPA 6020 (Diss)	07/13/11 09:31	07/19/11 08:16	45mL/50mL	45mL/50mL	1.00
A11G163-02	Water	EPA 6020 (Diss)	07/13/11 09:43	07/19/11 08:16	45mL/50mL	45mL/50mL	1.00
A11G163-03	Water	EPA 6020 (Diss)	07/13/11 10:30	07/19/11 08:16	45mL/50mL	45mL/50mL	1.00
A11G163-04	Water	EPA 6020 (Diss)	07/13/11 10:32	07/19/11 08:16	45mL/50mL	45mL/50mL	1.00
A11G163-05	Water	EPA 6020 (Diss)	07/13/11 10:43	07/19/11 08:16	45mL/50mL	45mL/50mL	1.00
A11G163-06	Water	EPA 6020 (Diss)	07/13/11 10:57	07/19/11 08:16	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1107185							
A11G163-01	Water	SM 2320 B	07/13/11 09:31	07/14/11 11:27	50mL/50mL	50mL/50mL	NA
A11G163-02	Water	SM 2320 B	07/13/11 09:43	07/14/11 11:27	50mL/50mL	50mL/50mL	NA
A11G163-03	Water	SM 2320 B	07/13/11 10:30	07/14/11 11:27	50mL/50mL	50mL/50mL	NA
A11G163-04	Water	SM 2320 B	07/13/11 10:32	07/14/11 11:27	50mL/50mL	50mL/50mL	NA
A11G163-05	Water	SM 2320 B	07/13/11 10:43	07/14/11 11:27	50mL/50mL	50mL/50mL	NA
A11G163-06	Water	SM 2320 B	07/13/11 10:57	07/14/11 11:27	50mL/50mL	50mL/50mL	NA

Prep: Total Dissolved Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1107224							
A11G163-01	Water	SM 2540 C	07/13/11 09:31	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-02	Water	SM 2540 C	07/13/11 09:43	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-03	Water	SM 2540 C	07/13/11 10:30	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 07/22/11 06:11

SAMPLE PREPARATION INFORMATION

Conventional Chemistry Parameters

Prep: Total Dissolved Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A11G163-04	Water	SM 2540 C	07/13/11 10:32	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-05	Water	SM 2540 C	07/13/11 10:43	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-06	Water	SM 2540 C	07/13/11 10:57	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1107223							
A11G163-01	Water	SM 2540 D	07/13/11 09:31	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-02	Water	SM 2540 D	07/13/11 09:43	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-03	Water	SM 2540 D	07/13/11 10:30	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-04	Water	SM 2540 D	07/13/11 10:32	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-05	Water	SM 2540 D	07/13/11 10:43	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA
A11G163-06	Water	SM 2540 D	07/13/11 10:57	07/18/11 12:35	1N/A/1N/A	1N/A/1mL	NA

Lab Filtration

Prep: Lab Filtration

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1107195							
A11G163-01	Water	NA	07/13/11 09:31	07/14/11 16:06	250mL/250mL		NA
A11G163-02	Water	NA	07/13/11 09:43	07/14/11 16:06	250mL/250mL		NA
A11G163-03	Water	NA	07/13/11 10:30	07/14/11 16:06	250mL/250mL		NA
A11G163-04	Water	NA	07/13/11 10:32	07/14/11 16:06	250mL/250mL		NA
A11G163-05	Water	NA	07/13/11 10:43	07/14/11 16:06	250mL/250mL		NA
A11G163-06	Water	NA	07/13/11 10:57	07/14/11 16:06	250mL/250mL		NA

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4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
07/22/11 06:11

Notes and Definitions

Qualifiers:

- A-01 Filtration blank from lab filter batch 1105074
A-02 Filtration blank from lab filter batch 1107195
B-02 Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
FILT1 Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.
PS-01 This sample requires a Post Spike to be performed. Data is not complete.
Q-03 Percent recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
Q-16 Reanalysis of an original Batch QC sample.

Notes and Conventions:

- DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD Relative Percent Difference
MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
- Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.
- For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.
- Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- *** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
07/22/11 06:11

APEX LABS **CHAIN OF CUSTODY** Lab # A11G163 000 Loc 1

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: <u>ERRG</u>		Project Mgr: <u>Brian Wetstein</u>		Project Name: <u>Blue Ledge Mine Project</u>		Project #: <u>2010-084</u>																										
Address: <u>4585 Pacheco Blvd, Suite 200</u>				Phone: <u>(925)969-0750</u>		Fax: <u>(925)969-0751</u>																										
Email: <u>brian.wetstein@errg.com</u>				Sampled by: <u>Kim Jones</u>																												
Site Location: OR WA Other: <u>CA</u>		ANALYSIS REQUEST																														
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	SWTPH-HCID	SWTPH-DX	SWTPH-GX	BTEX	SEM HHM YOCs	SEM HHM YOCs	SEM YOCs	SEM PAM	SEM PAM	1003 PCBs	1001 Chlor. Pest	RCRA Metals (6)	Priority Metals (13)	AL, As, Cd, Cr, Cu, Fe, Hg, Mn, Ni, Pb, Se, V, Zn	Disposal Metals (6)	TCLP Metals (6)	7-0021	7-0021	3062 US	3062 US	3062 US	3062 US	3062 US	3062 US	3062 US	3062 US	
<u>BL-DW-541-071311</u>		<u>7/13/11</u>	<u>9:31</u>	<u>W</u>	<u>2</u>														<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>							
<u>BL-DW-17667-071311</u>		<u>7/13/11</u>	<u>9:43</u>	<u>W</u>	<u>2</u>														<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>							
<u>BL-DW-462-071311</u>		<u>7/13/11</u>	<u>10:30</u>	<u>W</u>	<u>2</u>														<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>							
<u>BL-DW-462-071311 DuP</u>		<u>7/13/11</u>	<u>10:32</u>	<u>W</u>	<u>2</u>														<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>							
<u>BL-DW-12620-071311</u>		<u>7/13/11</u>	<u>10:43</u>	<u>W</u>	<u>2</u>														<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>							
<u>BL-DW-12620-071311 MS451</u>		<u>7/13/11</u>	<u>10:57</u>	<u>W</u>	<u>2</u>														<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>							
Normal Turn Around Time (TAT) = 7-10 Business Days		<input checked="" type="radio"/> YES		<input type="radio"/> NO		SPECIAL INSTRUCTIONS: <u>Dissolved metals (As, Cd, Cu, Pb, Zn) by EPA 6020 Cd-LL</u> <u>Please send results + sample receipt confirmation to</u> <u>kim.jones@errg.com and brian.wetstein@errg.com</u>																										
TAT Requested (circle)		1 Day		2 Day		3 Day		4 DAY		5 DAY		Other: _____																				
SAMPLES ARE HELD FOR 30 DAYS																																
RELINQUISHED BY:				RECEIVED BY:				RELINQUISHED BY:				RECEIVED BY:																				
Signature: <u>K. Jones</u>		Date: <u>7/13/11</u>		Signature: <u>Kendal Hinckley</u>		Date: <u>7-14-11</u>		Signature: _____		Date: _____		Signature: _____		Date: _____																		
Printed Name: <u>Kim Jones</u>		Time: <u>13:46</u>		Printed Name: <u>Hinckley</u>		Time: <u>9:12</u>		Printed Name: _____		Time: _____		Printed Name: _____		Time: _____																		
Company: <u>ERRG</u>		Shipped via <u>FedEx</u>		Company: <u>Apex</u>		Company: _____		Company: _____		Company: _____		Company: _____		Company: _____																		

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Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
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Wednesday, December 21, 2011

Kim Jones
Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

RE: Blue Ledge Mine / 2010-084

Enclosed are the results of analyses for work order A11K058, which was received by the laboratory on 11/3/2011 at 9:00:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



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Darwin Thomas, Business Development Director

Complete Report Page 1 of 45

Page 1 of 29

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BL-CS-JC10-110111	A11K058-01	Soil	11/01/11 10:45	11/03/11 09:00
BL-CS-JC09-110111	A11K058-02	Soil	11/01/11 11:57	11/03/11 09:00
BL-CS-JC09-110111 DUP	A11K058-03	Soil	11/01/11 11:57	11/03/11 09:00
BL-CS-JC08-110111	A11K058-04	Soil	11/01/11 11:26	11/03/11 09:00
BL-CS-EC06-110111	A11K058-05	Soil	11/01/11 13:25	11/03/11 09:00
BL-CS-JC01-110111	A11K058-06	Soil	11/01/11 13:03	11/03/11 09:00
BL-CS-JC01-110111 MSMSD	A11K058-07	Soil	11/01/11 13:03	11/03/11 09:00
BL-CS-EC04-110111	A11K058-08	Soil	11/01/11 13:48	11/03/11 09:00
BL-SW-EC04-110111	A11K058-09	Water	11/01/11 13:55	11/03/11 09:00
BL-SW-JC01-110111	A11K058-10	Water	11/01/11 13:11	11/03/11 09:00

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-SW-EC04-110111 (A11K058-09)			Matrix: Water		Batch: 1111076			
Sulfate	6.43	---	1.00	mg/L	1	11/03/11 17:43	300.0/9056A	
BL-SW-JC01-110111 (A11K058-10)			Matrix: Water		Batch: 1111076			
Sulfate	12.6	---	1.00	mg/L	1	11/03/11 18:04	300.0/9056A	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

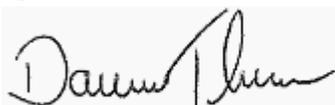
Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-CS-JC10-110111 (A11K058-01)			Matrix: Soil		Batch: 1111267			
Arsenic	85.1	---	3.87	mg/kg dry	10	11/14/11 18:18	EPA 6020	
Cadmium	19.8	0.193	0.387	"	"	"	"	
Copper	5030	---	38.7	"	50	11/15/11 14:34	"	
Iron	76500	---	96.7	"	10	11/14/11 18:18	"	
Lead	797	---	1.93	"	"	"	"	
Zinc	2900	---	7.74	"	"	"	"	
BL-CS-JC09-110111 (A11K058-02)			Matrix: Soil		Batch: 1111267			
Arsenic	30.0	---	2.49	mg/kg dry	10	11/14/11 18:26	EPA 6020	
Cadmium	1.79	0.124	0.249	"	"	"	"	
Copper	736	---	4.98	"	"	"	"	
Iron	41100	---	62.2	"	"	"	"	
Lead	147	---	1.24	"	"	"	"	
Zinc	403	---	4.98	"	"	"	"	
BL-CS-JC09-110111 DUP (A11K058-03)			Matrix: Soil		Batch: 1111267			
Arsenic	25.8	---	2.47	mg/kg dry	10	11/14/11 18:29	EPA 6020	
Cadmium	4.16	0.123	0.247	"	"	"	"	
Copper	1010	---	4.94	"	"	"	"	
Iron	31300	---	61.7	"	"	"	"	
Lead	90.6	---	1.23	"	"	"	"	
Zinc	688	---	4.94	"	"	"	"	
BL-CS-JC08-110111 (A11K058-04)			Matrix: Soil		Batch: 1111267			
Arsenic	ND	---	2.37	mg/kg dry	10	11/14/11 18:32	EPA 6020	
Cadmium	0.178	0.118	0.237	"	"	"	"	
Copper	62.2	---	4.74	"	"	"	"	
Iron	13400	---	59.2	"	"	"	"	
Lead	1.33	---	1.18	"	"	"	"	
Zinc	25.3	---	4.74	"	"	"	"	
BL-CS-EC06-110111 (A11K058-05)			Matrix: Soil		Batch: 1111267			
Arsenic	6.11	---	2.48	mg/kg dry	10	11/14/11 18:35	EPA 6020	
Cadmium	0.236	0.124	0.248	"	"	"	"	
Copper	37.2	---	4.96	"	"	"	"	
Iron	21500	---	62.0	"	"	"	"	
Lead	5.60	---	1.24	"	"	"	"	
Zinc	53.3	---	4.96	"	"	"	"	

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Darwin Thomas, Business Development Director

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-CS-JC01-110111 (A11K058-06)			Matrix: Soil		Batch: 1111267			
Arsenic	5.91	---	2.89	mg/kg dry	10	11/14/11 18:38	EPA 6020	
Cadmium	4.44	0.145	0.289	"	"	"	"	
Copper	975	---	5.78	"	"	"	"	
Iron	25000	---	72.3	"	"	"	"	
Lead	12.5	---	1.45	"	"	"	"	
Zinc	1010	---	5.78	"	"	"	"	
BL-CS-JC01-110111 MSMSD (A11K058-07)			Matrix: Soil		Batch: 1111267			
Arsenic	6.34	---	2.39	mg/kg dry	10	11/14/11 18:41	EPA 6020	
Cadmium	3.29	0.119	0.239	"	"	"	"	
Copper	903	---	4.77	"	"	"	"	
Iron	19300	---	59.7	"	"	"	"	
Lead	35.3	---	1.19	"	"	"	"	
Zinc	870	---	4.77	"	"	"	"	
BL-CS-EC04-110111 (A11K058-08)			Matrix: Soil		Batch: 1111267			
Arsenic	ND	---	2.33	mg/kg dry	10	11/14/11 18:56	EPA 6020	
Cadmium	0.339	0.117	0.233	"	"	"	"	
Copper	33.3	---	4.67	"	"	"	"	
Iron	9420	---	58.4	"	"	"	"	
Lead	3.40	---	1.17	"	"	"	"	
Zinc	57.1	---	4.67	"	"	"	"	

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-SW-EC04-110111 (A11K058-09)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	68.7	---	0.456	mg CaCO3/L	1	11/14/11 16:15	6020 Calc	
Arsenic	ND	---	2.00	ug/L	"	11/11/11 19:58	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.200	"	"	"	"	FILT1
Copper	ND	---	4.00	"	"	"	"	FILT1
Lead	ND	---	1.00	"	"	"	"	FILT1
Magnesium	5360	---	50.0	"	"	"	"	FILT1
Zinc	5.80	---	4.00	"	"	"	"	FILT1
BL-SW-EC04-110111 (A11K058-09RE1)			Matrix: Water		Batch: 1111264			
Calcium	18700	---	100	ug/L	1	11/14/11 16:15	EPA 6020 (Diss)	FILT1
Iron	199	---	50.0	"	"	"	"	FILT1
BL-SW-JC01-110111 (A11K058-10)			Matrix: Water		Batch: [CALC]			
Hardness (Calc by 6020) - Dissolved	72.4	---	0.456	mg CaCO3/L	1	11/14/11 16:18	6020 Calc	
Arsenic	ND	---	2.00	ug/L	"	11/11/11 20:04	EPA 6020 (Diss)	FILT1
Cadmium	0.589	---	0.200	"	"	"	"	FILT1
Copper	15.2	---	4.00	"	"	"	"	FILT1
Lead	ND	---	1.00	"	"	"	"	FILT1
Magnesium	4230	---	50.0	"	"	"	"	FILT1
Zinc	79.1	---	4.00	"	"	"	"	FILT1
BL-SW-JC01-110111 (A11K058-10RE1)			Matrix: Water		Batch: 1111264			
Calcium	22000	---	100	ug/L	1	11/14/11 16:18	EPA 6020 (Diss)	FILT1
Iron	218	---	50.0	"	"	"	"	FILT1

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Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

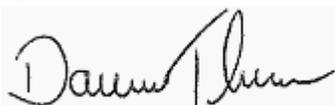
Reported:
12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-CS-JC10-110111 (A11K058-01)			Matrix: Soil	Batch: 1111119				
Total Solids	52.7	---	0.221	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-CS-JC09-110111 (A11K058-02)			Matrix: Soil	Batch: 1111119				
Total Solids	79.6	---	0.231	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-CS-JC09-110111 DUP (A11K058-03)			Matrix: Soil	Batch: 1111119				
Total Solids	81.3	---	0.184	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-CS-JC08-110111 (A11K058-04)			Matrix: Soil	Batch: 1111119				
Total Solids	84.9	---	0.184	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-CS-EC06-110111 (A11K058-05)			Matrix: Soil	Batch: 1111119				
Total Solids	75.9	---	0.224	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-CS-JC01-110111 (A11K058-06)			Matrix: Soil	Batch: 1111119				
Total Solids	84.6	---	0.234	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-CS-JC01-110111 MSMSD (A11K058-07)			Matrix: Soil	Batch: 1111119				
Total Solids	82.3	---	0.184	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-CS-EC04-110111 (A11K058-08)			Matrix: Soil	Batch: 1111119				
Total Solids	87.1	---	0.233	% by Weight	1	11/07/11 18:00	SM 2540 G	
BL-SW-EC04-110111 (A11K058-09)			Matrix: Water	Batch: 1111087				
Total Alkalinity	71.2	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	71.2	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Dissolved Solids	103	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-SW-JC01-110111 (A11K058-10)			Matrix: Water	Batch: 1111087				
Total Alkalinity	66.0	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	66.0	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Total Dissolved Solids	102	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-CS-JC10-110111 (A11K058-01)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	14.87	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	8.33	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	1.18	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	1.54	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	2.98	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	7.31	---		"	"	"	"	GS-01
Percent Retained 0.106 mm sieve (#140)	8.01	---		"	"	"	"	GS-01
Percent Retained 0.075 mm sieve (#200)	10.47	---		"	"	"	"	GS-01
Percent Retained 0.063 mm sieve (#230)	5.83	---		"	"	"	"	GS-01
Silt (> 0.005 mm < 0.063 mm)	40.20	---		"	"	"	"	GS-01
Clay (< 0.005 mm)	5.10	---		"	"	"	"	GS-01
BL-CS-JC09-110111 (A11K058-02)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	32.74	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	20.29	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	16.87	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	12.00	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	6.93	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	3.83	---		"	"	"	"	GS-01
Percent Retained 0.106 mm sieve (#140)	1.48	---		"	"	"	"	GS-01
Percent Retained 0.075 mm sieve (#200)	1.17	---		"	"	"	"	GS-01
Percent Retained 0.063 mm sieve (#230)	0.54	---		"	"	"	"	GS-01
Silt (> 0.005 mm < 0.063 mm)	4.40	---		"	"	"	"	GS-01

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-CS-JC09-110111 (A11K058-02)			Matrix: Soil	Batch: 1112257				
Clay (< 0.005 mm)	0.30	---		% of Total	1	"	ASTM D 422m	GS-01
BL-CS-JC09-110111 DUP (A11K058-03)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	28.07	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	20.08	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	17.82	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	12.11	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	7.89	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	4.95	---		"	"	"	"	GS-01
Percent Retained 0.106 mm sieve (#140)	2.00	---		"	"	"	"	GS-01
Percent Retained 0.075 mm sieve (#200)	1.53	---		"	"	"	"	GS-01
Percent Retained 0.063 mm sieve (#230)	0.69	---		"	"	"	"	GS-01
Silt (> 0.005 mm < 0.063 mm)	5.00	---		"	"	"	"	GS-01
Clay (< 0.005 mm)	0.60	---		"	"	"	"	GS-01
BL-CS-JC08-110111 (A11K058-04)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	26.91	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	34.80	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	21.97	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	7.30	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	2.53	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	1.73	---		"	"	"	"	GS-01
Percent Retained 0.106 mm sieve (#140)	0.90	---		"	"	"	"	GS-01
Percent Retained 0.075 mm sieve (#200)	0.80	---		"	"	"	"	GS-01

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 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-CS-JC08-110111 (A11K058-04)			Matrix: Soil	Batch: 1112257				
Percent Retained 0.063 mm sieve (#230)	0.38	---		% of Total	1	"	ASTM D 422m	GS-01
Silt (> 0.005 mm < 0.063 mm)	3.00	---		"	"	"	"	GS-01
Clay (< 0.005 mm)	0.10	---		"	"	"	"	GS-01
BL-CS-EC06-110111 (A11K058-05)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	0.11	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	3.43	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	29.12	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	35.50	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	16.16	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	6.77	---		"	"	"	"	GS-01
Percent Retained 0.106 mm sieve (#140)	2.42	---		"	"	"	"	GS-01
Percent Retained 0.075 mm sieve (#200)	1.72	---		"	"	"	"	GS-01
Percent Retained 0.063 mm sieve (#230)	0.67	---		"	"	"	"	GS-01
Silt (> 0.005 mm < 0.063 mm)	4.10	---		"	"	"	"	GS-01
Clay (< 0.005 mm)	0.70	---		"	"	"	"	GS-01
BL-CS-JC01-110111 (A11K058-06)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	12.07	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	15.46	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	33.56	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	24.31	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	7.64	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	2.32	---		"	"	"	"	GS-01
Percent Retained 0.106 mm sieve (#140)	0.81	---		"	"	"	"	GS-01

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Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-CS-JC01-110111 (A11K058-06)			Matrix: Soil	Batch: 1112257				
Percent Retained 0.075 mm sieve (#200)	0.75	---		% of Total	1	"	ASTM D 422m	GS-01
Percent Retained 0.063 mm sieve (#230)	0.33	---		"	"	"	"	GS-01
Silt (> 0.005 mm < 0.063 mm)	2.60	---		"	"	"	"	GS-01
Clay (< 0.005 mm)	0.40	---		"	"	"	"	GS-01
BL-CS-JC01-110111 MSMSD (A11K058-07)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	14.05	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	17.58	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	35.81	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	19.57	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	6.25	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	2.04	---		"	"	"	"	GS-01
Percent Retained 0.106 mm sieve (#140)	0.79	---		"	"	"	"	GS-01
Percent Retained 0.075 mm sieve (#200)	0.74	---		"	"	"	"	GS-01
Percent Retained 0.063 mm sieve (#230)	0.40	---		"	"	"	"	GS-01
Silt (> 0.005 mm < 0.063 mm)	2.80	---		"	"	"	"	GS-01
Clay (< 0.005 mm)	0.40	---		"	"	"	"	GS-01
BL-CS-EC04-110111 (A11K058-08)			Matrix: Soil	Batch: 1112257				
Percent Retained 4.75 mm sieve (#4)	18.41	---		% of Total	1	12/19/11 12:31	ASTM D 422m	GS-01
Percent Retained 2.00 mm sieve (#10)	46.46	---		"	"	"	"	GS-01
Percent Retained 0.85 mm sieve (#20)	26.21	---		"	"	"	"	GS-01
Percent Retained 0.425 mm sieve (#40)	4.08	---		"	"	"	"	GS-01
Percent Retained 0.250 mm sieve (#60)	1.12	---		"	"	"	"	GS-01
Percent Retained 0.150 mm sieve (#100)	0.95	---		"	"	"	"	GS-01

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-CS-EC04-110111 (A11K058-08)			Matrix: Soil		Batch: 1112257			
Percent Retained 0.106 mm sieve (#140)	0.55	---		% of Total	1	"	ASTM D 422m	GS-01
Percent Retained 0.075 mm sieve (#200)	0.50	---		"	"	"	"	GS-01
Percent Retained 0.063 mm sieve (#230)	0.22	---		"	"	"	"	GS-01
Silt (> 0.005 mm < 0.063 mm)	1.60	---		"	"	"	"	GS-01
Clay (< 0.005 mm)	0.10	---		"	"	"	"	GS-01

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12/21/11 11:36

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-CS-JC10-110111 (A11K058-01)			Matrix: Soil	Batch: 1111096				
% Solids	51.8	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	
BL-CS-JC09-110111 (A11K058-02)			Matrix: Soil	Batch: 1111096				
% Solids	75.1	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	
BL-CS-JC09-110111 DUP (A11K058-03)			Matrix: Soil	Batch: 1111096				
% Solids	82.0	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	
BL-CS-JC08-110111 (A11K058-04)			Matrix: Soil	Batch: 1111096				
% Solids	83.4	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	
BL-CS-EC06-110111 (A11K058-05)			Matrix: Soil	Batch: 1111096				
% Solids	79.7	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	
BL-CS-JC01-110111 (A11K058-06)			Matrix: Soil	Batch: 1111096				
% Solids	76.5	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	
BL-CS-JC01-110111 MSMSD (A11K058-07)			Matrix: Soil	Batch: 1111096				
% Solids	80.1	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	
BL-CS-EC04-110111 (A11K058-08)			Matrix: Soil	Batch: 1111096				
% Solids	83.0	---	1.00	% by Weight	1	11/07/11 09:21	Apex SOP	

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Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

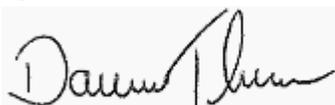
Reported:
12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111076 - Method Prep: Aq						Water						
Blank (1111076-BLK1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 15:21						
300.0/9056A												
Sulfate	ND	---	1.00	mg/L	1	---	---	---	---	---	---	---
LCS (1111076-BS1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 15:41						
300.0/9056A												
Sulfate	4.00	---	1.00	mg/L	1	4.00	---	100	90-110%	---	---	---
Duplicate (1111076-DUP1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 16:22						
QC Source Sample: Other (A11K056-02)												
300.0/9056A												
Sulfate	ND	---	1.00	mg/L	1	---	ND	---	---	---	---	15%
Duplicate (1111076-DUP2)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 23:30						
QC Source Sample: Other (A11K062-11)												
300.0/9056A												
Sulfate	5.88	---	1.00	mg/L	1	---	5.88	---	---	0.02	---	15%
Matrix Spike (1111076-MS1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 16:42						
QC Source Sample: Other (A11K056-02)												
300.0/9056A												
Sulfate	4.04	---	1.11	mg/L	1	4.44	ND	91	80-120%	---	---	---
Matrix Spike (1111076-MS2)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 23:50						
QC Source Sample: Other (A11K062-11)												
300.0/9056A												
Sulfate	10.2	---	1.11	mg/L	1	4.44	5.88	97	80-120%	---	---	---

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Project: **Blue Ledge Mine**
Project Number: 2010-084
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Reported:
12/21/11 11:36

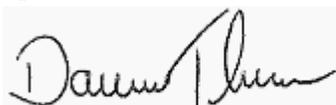
QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111267 - EPA 3051A						Soil						
Blank (1111267-BLK1)						Prepared: 11/14/11 10:54 Analyzed: 11/14/11 17:35						
EPA 6020												
Arsenic	ND	---	2.00	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.100	0.200	"	"	---	---	---	---	---	---	
Copper	ND	---	4.00	"	"	---	---	---	---	---	---	
Iron	ND	---	50.0	"	"	---	---	---	---	---	---	
Lead	ND	---	1.00	"	"	---	---	---	---	---	---	
Zinc	ND	---	4.00	"	"	---	---	---	---	---	---	
LCS (1111267-BS1)						Prepared: 11/14/11 10:54 Analyzed: 11/14/11 17:38						
EPA 6020												
Arsenic	50.7	---	2.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Cadmium	53.3	0.100	0.200	"	"	"	---	107	"	---	---	
Copper	51.3	---	4.00	"	"	"	---	103	"	---	---	
Iron	5160	---	50.0	"	"	5000	---	103	"	---	---	
Lead	53.3	---	1.00	"	"	50.0	---	107	"	---	---	
Zinc	52.0	---	4.00	"	"	"	---	104	"	---	---	
Duplicate (1111267-DUP1)						Prepared: 11/14/11 10:54 Analyzed: 11/14/11 18:21						
QC Source Sample: BL-CS-JC10-110111 (A11K058-01)												
EPA 6020												
Arsenic	80.8	---	4.14	mg/kg dry	10	---	85.1	---	---	5	40%	
Cadmium	16.5	0.207	0.414	"	"	---	19.8	---	---	18	40%	
Copper	4570	---	8.29	"	"	---	5030	---	---	9	40%	Q-03
Iron	72600	---	104	"	"	---	76500	---	---	5	40%	
Lead	788	---	2.07	"	"	---	797	---	---	1	40%	
Zinc	2330	---	8.29	"	"	---	2900	---	---	22	40%	
Matrix Spike (1111267-MS1)						Prepared: 11/14/11 10:54 Analyzed: 11/14/11 18:23						
QC Source Sample: BL-CS-JC10-110111 (A11K058-01)												
EPA 6020												
Arsenic	180	---	4.24	mg/kg dry	10	106	85.1	89	75-125%	---	---	
Cadmium	127	0.212	0.424	"	"	"	19.8	101	"	---	---	
Copper	4070	---	8.49	"	"	"	5030	-902	"	---	---	Q-03
Iron	76100	---	106	"	"	10600	76500	-3	"	---	---	Q-03
Lead	882	---	2.12	"	"	106	797	80	"	---	---	
Zinc	2730	---	8.49	"	"	"	2900	-160	"	---	---	Q-03

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Project: **Blue Ledge Mine**
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Project Manager: Kim Jones

Reported:
12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111267 - EPA 3051A						Soil						
Matrix Spike (1111267-MS2)						Prepared: 11/14/11 10:54 Analyzed: 11/14/11 17:50						
QC Source Sample: Other (A11K110-04)												
EPA 6020												
Arsenic	59.0	---	2.33	mg/kg dry	10	58.2	3.66	95	75-125%	---	---	
Cadmium	58.8	0.116	0.233	"	"	"	0.284	100	"	---	---	
Copper	87.4	---	4.66	"	"	"	29.2	100	"	---	---	
Iron	36700	---	58.2	"	"	5820	28700	138	"	---	---	Q-03
Lead	63.2	---	1.16	"	"	58.2	6.49	97	"	---	---	
Zinc	121	---	4.66	"	"	"	61.3	103	"	---	---	
Post Spike (1111267-PS1)						Prepared: 11/14/11 17:59 Analyzed: 11/14/11 18:02						
QC Source Sample: Post Spike (A11K110-04)												
EPA 6020												
Iron	318000	---		ug/L	10	90900	220000	108	80-120%		---	
Post Spike (1111267-PS2)						Prepared: 11/15/11 14:24 Analyzed: 11/15/11 14:37						
QC Source Sample: BL-CS-JC10-110111 (A11K058-01)												
EPA 6020												
Iron	467000	---		ug/L	50	250000	198000	108	80-120%		---	
Zinc	9640	---		"	"	2500	7500	86	"		---	
Post Spike (1111267-PS3)						Prepared: 11/15/11 15:18 Analyzed: 11/15/11 15:24						
QC Source Sample: BL-CS-JC10-110111 (A11K058-01)												
EPA 6020												
Copper	18200	---		ug/L	50	5000	13000	104	80-120%		---	

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Project Number: 2010-084
Project Manager: Kim Jones

Reported:
12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111249 - EPA 3015A - Dissolved						Water						
Blank (1111249-BLK1)						Prepared: 11/11/11 13:54 Analyzed: 11/11/11 19:44						
EPA 6020 (Diss)												
Arsenic	ND	---	2.00	ug/L	1	---	---	---	---	---	---	A-01
Cadmium	ND	---	0.200	"	"	---	---	---	---	---	---	A-01
Copper	ND	---	4.00	"	"	---	---	---	---	---	---	A-01
Lead	ND	---	1.00	"	"	---	---	---	---	---	---	A-01
Magnesium	ND	---	50.0	"	"	---	---	---	---	---	---	A-01
Zinc	ND	---	4.00	"	"	---	---	---	---	---	---	A-01
Blank (1111249-BLK2)						Prepared: 11/11/11 13:54 Analyzed: 11/11/11 19:49						
EPA 6020 (Diss)												
Arsenic	ND	---	2.00	ug/L	1	---	---	---	---	---	---	A-02, FILT1
Cadmium	ND	---	0.200	"	"	---	---	---	---	---	---	A-02, FILT1
Copper	ND	---	4.00	"	"	---	---	---	---	---	---	A-02, FILT1
Lead	ND	---	1.00	"	"	---	---	---	---	---	---	A-02, FILT1
Magnesium	ND	---	50.0	"	"	---	---	---	---	---	---	A-02, FILT1
Zinc	ND	---	4.00	"	"	---	---	---	---	---	---	A-02, FILT1
LCS (1111249-BS1)						Prepared: 11/11/11 13:54 Analyzed: 11/11/11 19:52						
EPA 6020 (Diss)												
Arsenic	53.7	---	2.00	ug/L	1	55.6	---	97	80-120%	---	---	
Cadmium	53.0	---	0.200	"	"	"	---	95	"	---	---	
Copper	55.8	---	4.00	"	"	"	---	100	"	---	---	
Lead	52.6	---	1.00	"	"	"	---	95	"	---	---	
Magnesium	5680	---	50.0	"	"	5560	---	102	"	---	---	
Zinc	53.5	---	4.00	"	"	55.6	---	96	"	---	---	
Duplicate (1111249-DUP1)						Prepared: 11/11/11 13:54 Analyzed: 11/11/11 20:01						
QC Source Sample: BL-SW-EC04-110111 (A11K058-09)												
EPA 6020 (Diss)												
Arsenic	ND	---	2.00	ug/L	1	---	ND	---	---	---	20%	
Cadmium	ND	---	0.200	"	"	---	ND	---	---	---	20%	
Copper	ND	---	4.00	"	"	---	ND	---	---	---	20%	
Lead	ND	---	1.00	"	"	---	ND	---	---	---	20%	
Magnesium	5960	---	50.0	"	"	---	5360	---	---	11	20%	
Zinc	5.94	---	4.00	"	"	---	5.80	---	---	2	20%	

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111249 - EPA 3015A - Dissolved						Water						
Matrix Spike (1111249-MS1)						Prepared: 11/11/11 13:54 Analyzed: 11/11/11 20:07						
QC Source Sample: BL-SW-JC01-110111 (A11K058-10)												
EPA 6020 (Diss)												
Arsenic	54.0	---	2.00	ug/L	1	55.6	ND	97	75-125%	---	---	
Cadmium	54.9	---	0.200	"	"	"	0.589	98	"	---	---	
Copper	68.9	---	4.00	"	"	"	15.2	97	"	---	---	
Lead	53.2	---	1.00	"	"	"	ND	96	"	---	---	
Magnesium	9850	---	50.0	"	"	5560	4230	101	"	---	---	
Zinc	131	---	4.00	"	"	55.6	79.1	93	"	---	---	

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Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

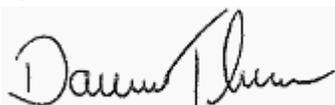
Reported:
 12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111264 - EPA 3015A - Dissolved						Water						
Blank (1111264-BLK1)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:45						
EPA 6020 (Diss)												
Calcium	ND	---	100	ug/L	1	---	---	---	---	---	---	A-01
Iron	ND	---	50.0	"	"	---	---	---	---	---	---	A-01
Blank (1111264-BLK2)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:48						
EPA 6020 (Diss)												
Calcium	ND	---	100	ug/L	1	---	---	---	---	---	---	A-02, FILT1
Iron	ND	---	50.0	"	"	---	---	---	---	---	---	A-02, FILT1
Blank (1111264-BLK3)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:51						
EPA 6020 (Diss)												
Calcium	ND	---	100	ug/L	1	---	---	---	---	---	---	A-03, FILT1
Iron	ND	---	50.0	"	"	---	---	---	---	---	---	A-03, FILT1
LCS (1111264-BS1)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:54						
EPA 6020 (Diss)												
Calcium	5560	---	100	ug/L	1	5550	---	100	80-120%	---	---	
Iron	5520	---	50.0	"	"	"	---	100	"	---	---	
Duplicate (1111264-DUP1)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 16:00						
QC Source Sample: Other (A11K057-01)												
EPA 6020 (Diss)												
Calcium	5040	---	100	ug/L	1	---	5030	---	---	0.2	20%	
Iron	85.9	---	50.0	"	"	---	92.3	---	---	7	20%	
Matrix Spike (1111264-MS1)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 16:03						
QC Source Sample: Other (A11K057-01)												
EPA 6020 (Diss)												
Calcium	11000	---	100	ug/L	1	5550	5030	108	75-125%	---	---	
Iron	5620	---	50.0	"	"	"	92.3	100	"	---	---	
Matrix Spike (1111264-MS2)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 17:05						
QC Source Sample: Other (A11K062-11)												
EPA 6020 (Diss)												
Calcium	23900	---	500	ug/L	5	5550	18200	101	75-125%	---	---	
Iron	5690	---	250	"	"	"	176	99	"	---	---	

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Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111087 - Method Prep: Aq						Water						
Blank (1111087-BLK1)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
SM 2320 B												
Total Alkalinity	ND	---	20.0	mg CaCO3/L	1	---	---	---	---	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
LCS (1111087-BS1)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
SM 2320 B												
Total Alkalinity	191	---	20.0	mg CaCO3/L	1	191	---	100	85-115%	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	0.000100	---		0-200%	---	---	---
Carbonate Alkalinity	183	---	20.0	"	"	191	---	96	"	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	0.000100	---		"	---	---	---
Duplicate (1111087-DUP1)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
QC Source Sample: BL-SW-EC04-110111 (A11K058-09)												
SM 2320 B												
Total Alkalinity	71.0	---	20.0	mg CaCO3/L	1	---	71.2	---	---	0.3	20%	
Bicarbonate Alkalinity	71.0	---	20.0	"	"	---	71.2	---	---	0.3	20%	
Carbonate Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	
Hydroxide Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	
Duplicate (1111087-DUP2)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
QC Source Sample: Other (A11K062-11)												
SM 2320 B												
Total Alkalinity	63.2	---	20.0	mg CaCO3/L	1	---	61.0	---	---	4	20%	
Bicarbonate Alkalinity	63.2	---	20.0	"	"	---	61.0	---	---	4	20%	
Carbonate Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	
Hydroxide Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

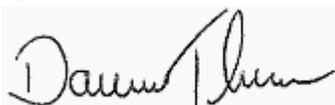
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 12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111089 - Total Dissolved Solids						Water						
Blank (1111089-BLK1)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
SM 2540 C												
Total Dissolved Solids	ND	---	10.0	mg/L	1	---	---	---	---	---	---	---
Duplicate (1111089-DUP1)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
QC Source Sample: BL-SW-EC04-110111 (A11K058-09)												
SM 2540 C												
Total Dissolved Solids	84.0	---	10.0	mg/L	1	---	103	---	---	20	20%	
Duplicate (1111089-DUP2)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
QC Source Sample: Other (A11K062-11)												
SM 2540 C												
Total Dissolved Solids	97.0	---	10.0	mg/L	1	---	88.0	---	---	10	20%	
Reference (1111089-SRM1)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
SM 2540 C												
Total Dissolved Solids	1000	---		mg/L	1	1000		100	90-110%	---	---	

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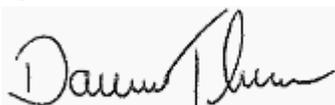
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 12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111090 - Total Suspended Solids						Water						
Blank (1111090-BLK1)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	---
Duplicate (1111090-DUP1)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
QC Source Sample: BL-SW-EC04-110111 (A11K058-09)												
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	---	20%
Duplicate (1111090-DUP2)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
QC Source Sample: Other (A11K062-11)												
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	---	20%
Reference (1111090-SRM1)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
SM 2540 D												
Total Suspended Solids	94.0	---		mg/L	1	100		94	90-110%	---	---	

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 Martinez, CA 94553

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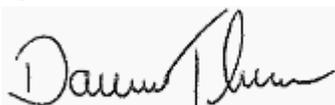
Reported:
 12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 111119 - Total Solids (Dry Weight)						Soil						
Duplicate (111119-DUP1)						Prepared: 11/07/11 18:00 Analyzed: 11/07/11 18:00						
QC Source Sample: Other (A11J330-01)												
SM 2540 G												
Total Solids	60.4	---	0.236	% by Weight	1	---	61.8	---	---	2	20%	
Duplicate (111119-DUP2)						Prepared: 11/07/11 18:00 Analyzed: 11/07/11 18:00						
QC Source Sample: BL-CS-EC04-110111 (A11K058-08)												
SM 2540 G												
Total Solids	85.4	---	0.181	% by Weight	1	---	87.1	---	---	2	20%	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
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 Martinez, CA 94553

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 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111096 - Total Solids (Dry Weight)						Soil						
Duplicate (1111096-DUP1)						Prepared: 11/04/11 10:31 Analyzed: 11/07/11 09:21						
QC Source Sample: BL-CS-JC09-110111 (A11K058-02)												
Apex SOP												
% Solids	74.9	---	1.00	% by Weight	1	---	75.1	---	---	0.3	20%	
Duplicate (1111096-DUP2)						Prepared: 11/04/11 10:31 Analyzed: 11/07/11 09:21						
QC Source Sample: BL-CS-EC04-110111 (A11K058-08)												
Apex SOP												
% Solids	83.8	---	1.00	% by Weight	1	---	83.0	---	---	1	20%	
Duplicate (1111096-DUP3)						Prepared: 11/04/11 13:34 Analyzed: 11/07/11 09:21						
QC Source Sample: Other (A11K078-01)												
Apex SOP												
% Solids	78.8	---	1.00	% by Weight	1	---	78.8	---	---	0	20%	

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Reported:
 12/21/11 11:36

SAMPLE PREPARATION INFORMATION

Anions by EPA 300.0/9056A (Ion Chromatography)

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111076							
A11K058-09	Water	300.0/9056A	11/01/11 13:55	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K058-10	Water	300.0/9056A	11/01/11 13:11	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111267							
A11K058-01	Soil	EPA 6020	11/01/11 10:45	11/14/11 10:54	0.499g/50mL	0.5g/50mL	1.00
A11K058-02	Soil	EPA 6020	11/01/11 11:57	11/14/11 10:54	0.535g/50mL	0.5g/50mL	0.94
A11K058-03	Soil	EPA 6020	11/01/11 11:57	11/14/11 10:54	0.494g/50mL	0.5g/50mL	1.01
A11K058-04	Soil	EPA 6020	11/01/11 11:26	11/14/11 10:54	0.506g/50mL	0.5g/50mL	0.99
A11K058-05	Soil	EPA 6020	11/01/11 13:25	11/14/11 10:54	0.506g/50mL	0.5g/50mL	0.99
A11K058-06	Soil	EPA 6020	11/01/11 13:03	11/14/11 10:54	0.452g/50mL	0.5g/50mL	1.11
A11K058-07	Soil	EPA 6020	11/01/11 13:03	11/14/11 10:54	0.523g/50mL	0.5g/50mL	0.96
A11K058-08	Soil	EPA 6020	11/01/11 13:48	11/14/11 10:54	0.516g/50mL	0.5g/50mL	0.97

Dissolved Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A - Dissolved

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111249							
A11K058-09	Water	EPA 6020 (Diss)	11/01/11 13:55	11/11/11 13:54	45mL/50mL	45mL/50mL	1.00
A11K058-10	Water	EPA 6020 (Diss)	11/01/11 13:11	11/11/11 13:54	45mL/50mL	45mL/50mL	1.00
Batch: 1111264							
A11K058-09RE1	Water	EPA 6020 (Diss)	11/01/11 13:55	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K058-10RE1	Water	EPA 6020 (Diss)	11/01/11 13:11	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

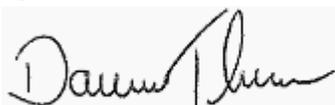
Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111087							
A11K058-09	Water	SM 2320 B	11/01/11 13:55	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K058-10	Water	SM 2320 B	11/01/11 13:11	11/04/11 08:29	50mL/50mL	50mL/50mL	NA

Prep: Total Dissolved Solids

Sample	Default	RL Prep
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Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
12/21/11 11:36

SAMPLE PREPARATION INFORMATION

Conventional Chemistry Parameters

Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1111089							
A11K058-09	Water	SM 2540 C	11/01/11 13:55	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K058-10	Water	SM 2540 C	11/01/11 13:11	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
Prep: Total Solids (Dry Weight)					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1111119							
A11K058-01	Soil	SM 2540 G	11/01/11 10:45	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
A11K058-02	Soil	SM 2540 G	11/01/11 11:57	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
A11K058-03	Soil	SM 2540 G	11/01/11 11:57	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
A11K058-04	Soil	SM 2540 G	11/01/11 11:26	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
A11K058-05	Soil	SM 2540 G	11/01/11 13:25	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
A11K058-06	Soil	SM 2540 G	11/01/11 13:03	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
A11K058-07	Soil	SM 2540 G	11/01/11 13:03	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
A11K058-08	Soil	SM 2540 G	11/01/11 13:48	11/07/11 18:00	1N/A/1N/A	1N/A/1N/A	NA
Prep: Total Suspended Solids					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1111090							
A11K058-09	Water	SM 2540 D	11/01/11 13:55	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K058-10	Water	SM 2540 D	11/01/11 13:11	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA

Grain Size by ASTM D 422

Prep: ASTM D 421

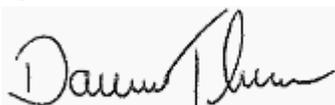
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1112257							
A11K058-01	Soil	ASTM D 422m	11/01/11 10:45	12/14/11 12:48	1N/A/1N/A	1N/A/1N/A	NA
A11K058-02	Soil	ASTM D 422m	11/01/11 11:57	12/14/11 13:11	1N/A/1N/A	1N/A/1N/A	NA
A11K058-03	Soil	ASTM D 422m	11/01/11 11:57	12/14/11 13:32	1N/A/1N/A	1N/A/1N/A	NA
A11K058-04	Soil	ASTM D 422m	11/01/11 11:26	12/14/11 13:59	1N/A/1N/A	1N/A/1N/A	NA
A11K058-05	Soil	ASTM D 422m	11/01/11 13:25	12/14/11 14:28	1N/A/1N/A	1N/A/1N/A	NA
A11K058-06	Soil	ASTM D 422m	11/01/11 13:03	12/14/11 14:53	1N/A/1N/A	1N/A/1N/A	NA
A11K058-07	Soil	ASTM D 422m	11/01/11 13:03	12/14/11 15:36	1N/A/1N/A	1N/A/1N/A	NA
A11K058-08	Soil	ASTM D 422m	11/01/11 13:48	12/14/11 15:57	1N/A/1N/A	1N/A/1N/A	NA

Lab Filtration

Prep: Lab Filtration

Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
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Darwin Thomas, Business Development Director

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 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 12/21/11 11:36

SAMPLE PREPARATION INFORMATION

Lab Filtration

Prep: Lab Filtration

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111083							
A11K058-09	Water	NA	11/01/11 13:55	11/03/11 20:02	150mL/150mL		NA
A11K058-10	Water	NA	11/01/11 13:11	11/03/11 20:09	150mL/150mL		NA

Apex Laboratories



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
12/21/11 11:36

Notes and Definitions

Qualifiers:

- A-01 Non filtered method blank
A-02 Filtration blank from lab filter batch 1111083
A-03 Filtration blank from lab filter batch 1111257
FILT1 Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.
GS-01 See final pages of this report for detailed Particle Size Analysis results and accumulation curve.
Q-03 Percent recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.

Notes and Conventions:

- DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD Relative Percent Difference
MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
- Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.
- For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.
- Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- *** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-JC10-110111 (A11K058-01)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			14.87
Retained on No. 4 sieve	4.75	85.13	14.87
Sand			39.83
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	76.8	8.33
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	75.61	1.18
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	74.07	1.54
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	71.1	2.98
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	63.78	7.31
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	55.77	8.01
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	45.3	10.47
Silt and Clay (Measurements in the Clay fraction are noted)			45.3
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	39.67	5.63
Hydrometer Test	0.0449	34.49	5.19
Hydrometer Test	0.0337	24.87	9.62
Hydrometer Test	0.0248	18.46	6.41
Hydrometer Test	0.0180	14.18	4.27
Hydrometer Test	0.0136	10.41	3.77
Hydrometer Test	0.0097	7.2	3.21
Hydrometer Test	0.0069	6.17	1.03
Hydrometer Test	0.0056	5.1	1.07
Hydrometer Test	Clay	0.0049	4.1
Hydrometer Test	Clay	0.0035	4.14
Hydrometer Test	Clay	0.0028	3.07
Hydrometer Test	Clay	0.0014	1.9

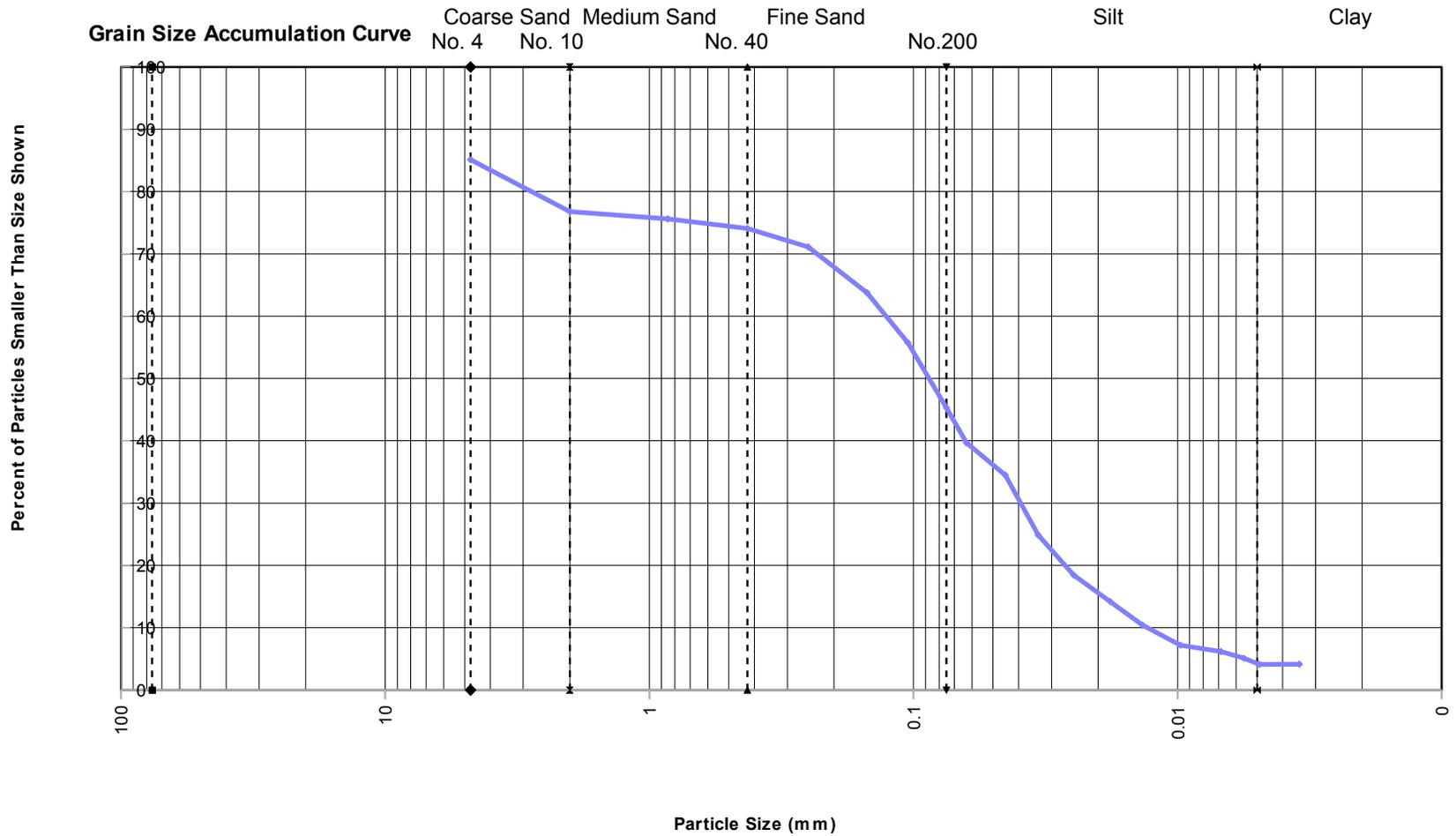
Grain Size Summary	Percent of Total Sample
Gravel	14.9
Sand	39.8
Coarse sand	9.5
Medium sand	11.8
Fine sand	18.5
Silt	40.2
Clay	5.1

Case Narrative for Sample ID: BL-CS-JC10-110111 (A11K058-01)

No difficulty dispersing the fraction passing the No. 10 sieve.
Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.
The assumed specific gravity used in the calculations was 2.65.
Organic material is present in the +4 and +10 fraction of this sample.
This type of material may have broken down in the sieving process, affecting grain size analysis.
Hydrometer readings for 1, 2, 4, 8, and 15 minutes are estimated due to the presence of foam.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified



Sample ID:		BL-CS-JC10-110111 (A11K058-01)		
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Rounded	Hard and Durable	Sandy Gravelly SILT

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-JC09-110111 (A11K058-02)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			32.74
Retained on No. 4 sieve	4.75	67.26	32.74
Sand			62.56
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	46.97	20.29
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	30.1	16.87
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	18.1	12.00
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	11.17	6.93
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	7.35	3.83
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	5.87	1.48
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	4.7	1.17
Silt and Clay (Measurements in the Clay fraction are noted)			4.7
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	4.16	0.54
Hydrometer Test	0.0513	2.16	2
Hydrometer Test	0.0367	1.87	0.29
Hydrometer Test	0.0263	1.39	0.48
Hydrometer Test	0.0188	0.91	0.48
Hydrometer Test	0.0139	0.53	0.38
Hydrometer Test	0.0098	0.53	0
Hydrometer Test	0.0070	0.35	0.19
Hydrometer Test	0.0057	0.35	0
Hydrometer Test	Clay	0.0049	0.36
Hydrometer Test	Clay	0.0035	0.19
Hydrometer Test	Clay	0.0029	0
Hydrometer Test	Clay	0.0014	0.01

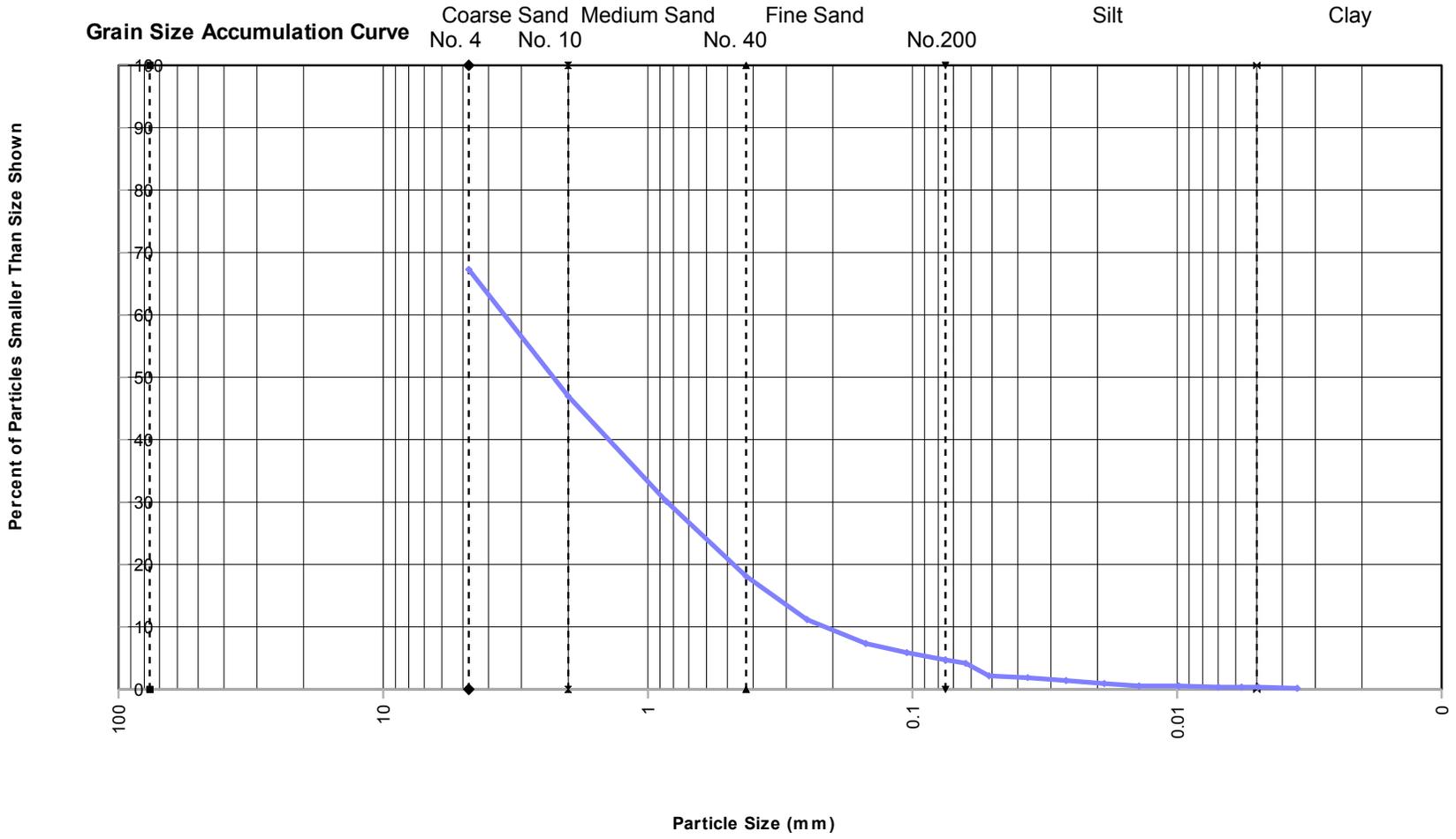
Grain Size Summary	Percent of Total Sample
Gravel	32.7
Sand	62.6
Coarse sand	37.2
Medium sand	22.8
Fine sand	2.6
Silt	4.4
Clay	0.3

Case Narrative for Sample ID: BL-CS-JC09-110111 (A11K058-02)

No difficulty dispersing the fraction passing the No. 10 sieve.
Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.
The assumed specific gravity used in the calculations was 2.65.
Organic material was present in the +4 and +10 fractions of this sample.
This type of material may have broken down in the sieving process, affecting grain size analysis.
Hydrometer readings for 1, 2, 4, and 8 minutes are estimated due to the presence of foam.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified



Sample ID:		BL-CS-JC09-110111 (A11K058-02)		
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Angular	Hard and Durable	Gravelly SAND with trace Silt

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-JC09-110111 DUP (A11K058-03)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			28.07
Retained on No. 4 sieve	4.75	71.93	28.07
Sand			66.38
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	51.85	20.08
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	34.03	17.82
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	21.92	12.11
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	14.03	7.89
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	9.08	4.95
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	7.08	2.00
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	5.55	1.53
Silt and Clay (Measurements in the Clay fraction are noted)			5.55
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	4.86	0.69
Hydrometer Test	0.0522	2.2	2.65
Hydrometer Test	0.0372	1.95	0.25
Hydrometer Test	0.0263	1.83	0.13
Hydrometer Test	0.0186	1.58	0.25
Hydrometer Test	0.0137	1.32	0.25
Hydrometer Test	0.0098	0.7	0.63
Hydrometer Test	0.0070	0.7	0
Hydrometer Test	0.0057	0.58	0.12
Hydrometer Test	Clay	0.0049	0.47
Hydrometer Test	Clay	0.0035	0.46
Hydrometer Test	Clay	0.0029	0
Hydrometer Test	Clay	0.0014	0.32

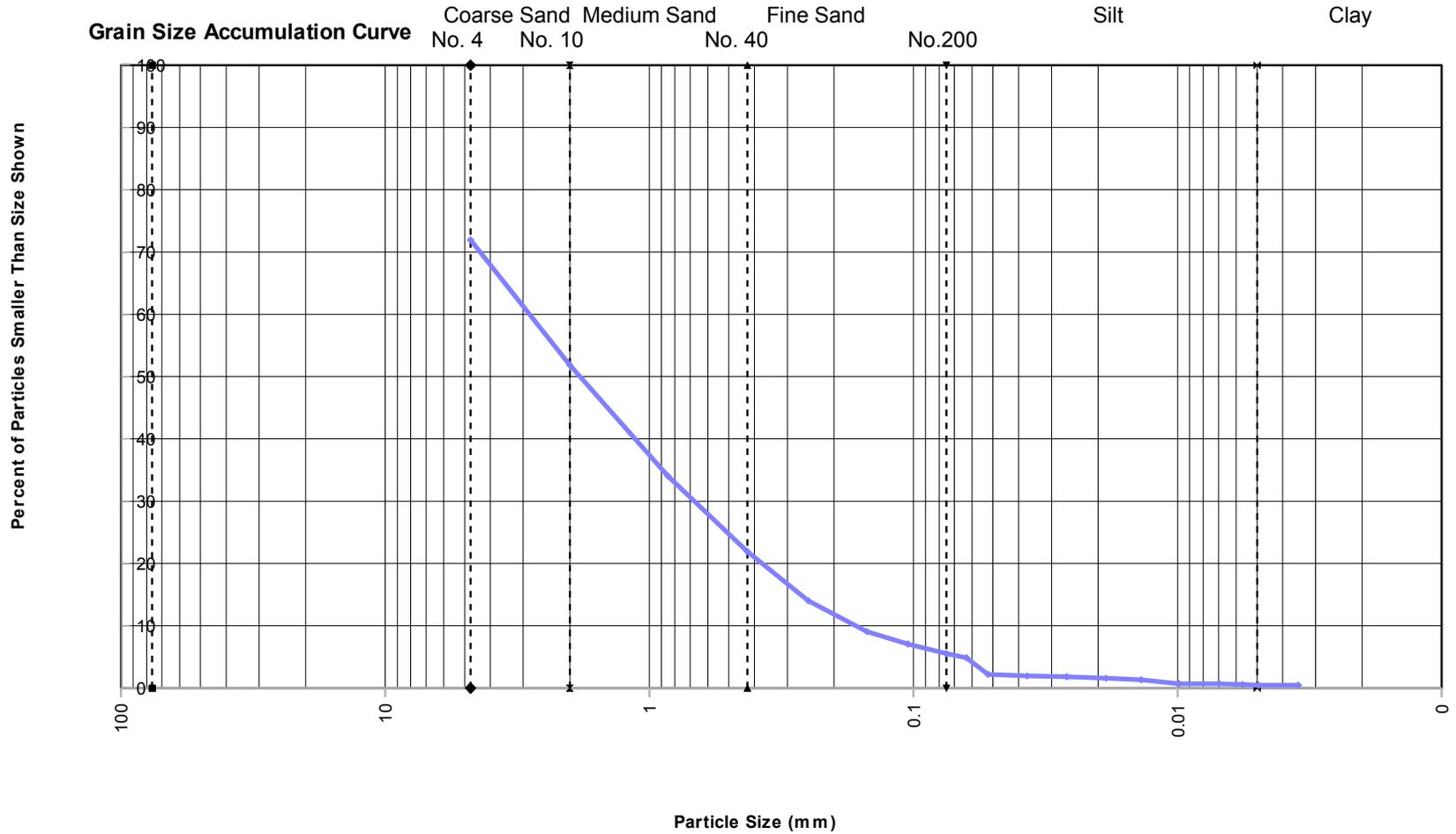
Grain Size Summary	Percent of Total Sample
Gravel	28.1
Sand	66.4
Coarse sand	37.9
Medium sand	25.0
Fine sand	3.5
Silt	5.0
Clay	0.6

Case Narrative for Sample ID: BL-CS-JC09-110111 DUP (A11K058-03)

No difficulty dispersing the fraction passing the No. 10 sieve.
Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.
The assumed specific gravity used in the calculations was 2.65.
Organic material is present in the +10 fraction of this sample.
This type of material may have broken down in the sieving process, affecting grain size analysis.
Hydrometer readings for 1, 2, 4, 8, and 15 minutes are estimated due to the presence of foam.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified



Sample ID:		BL-CS-JC09-110111 DUP (A11K058-03)		
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Angular	Hard and Durable	SAND with some Gravel

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-JC08-110111 (A11K058-04)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			26.91
Retained on No. 4 sieve	4.75	73.09	26.91
Sand			70.02
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	38.29	34.8
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	16.31	21.97
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	9.01	7.30
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	6.49	2.53
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	4.76	1.73
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	3.86	0.90
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	3.07	0.80
Silt and Clay (Measurements in the Clay fraction are noted)			3.07
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	2.69	0.38
Hydrometer Test	0.0526	1.1	1.59
Hydrometer Test	0.0375	0.75	0.35
Hydrometer Test	0.0266	0.61	0.14
Hydrometer Test	0.0191	0.33	0.28
Hydrometer Test	0.0140	0.26	0.07
Hydrometer Test	0.0099	0.26	0
Hydrometer Test	0.0070	0.12	0.14
Hydrometer Test	0.0057	0.12	0
Hydrometer Test	Clay	0.0050	0.12
Hydrometer Test	Clay	0.0035	0.12
Hydrometer Test	Clay	0.0029	0.07
Hydrometer Test	Clay	0.0014	0.04

Grain Size Summary	Percent of Total Sample
Gravel	26.9
Sand	70.0
Coarse sand	56.8
Medium sand	11.6
Fine sand	1.7
Silt	2.9
Clay	0.1

Case Narrative for Sample ID: BL-CS-JC08-110111 (A11K058-04)

No difficulty dispersing the fraction passing the No. 10 sieve.
Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.
The assumed specific gravity used in the calculations was 2.65.
Organic material is present in the +4 fraction of this sample.
This type of material may have broken down in the sieving process, affecting grain size analysis.
Hydrometer readings for 1, 2, and 4 minutes are estimated due to the presence of foam.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-EC06-110111 (A11K058-05)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			0.11
Retained on No. 4 sieve	4.75	99.89	0.11
Sand			95.11
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	96.46	3.43
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	67.34	29.12
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	31.84	35.50
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	15.69	16.16
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	8.92	6.77
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	6.5	2.42
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	4.78	1.72
Silt and Clay (Measurements in the Clay fraction are noted)			4.84
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	4.11	0.67
Hydrometer Test	0.0527	5.27	0
Hydrometer Test	0.0375	4.43	0
Hydrometer Test	0.0268	3.18	0.93
Hydrometer Test	0.0191	2.35	0.84
Hydrometer Test	0.0139	2.37	0
Hydrometer Test	0.0098	2.37	0
Hydrometer Test	0.0070	1.51	0.84
Hydrometer Test	0.0057	0.67	0.84
Hydrometer Test	Clay	0.0050	0
Hydrometer Test	Clay	0.0035	0
Hydrometer Test	Clay	0.0029	0
Hydrometer Test	Clay	0.0014	0

Grain Size Summary	Percent of Total Sample
Gravel	0.1
Sand	95.1
Coarse sand	32.6
Medium sand	58.4
Fine sand	4.1
Silt	4.1
Clay	0.7

Case Narrative for Sample ID: BL-CS-EC06-110111 (A11K058-05)

No difficulty dispersing the fraction passing the No. 10 sieve.
Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.
The assumed specific gravity used in the calculations was 2.65.
Organic material was present in the +10 fraction of this sample.
This type of material may have broken down in the sieving process, affecting grain size analysis.
Hydrometer readings for 1, 2, and 4 minutes are estimated due to the presence of foam.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-JC01-110111 (A11K058-06)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			12.07
Retained on No. 4 sieve	4.75	87.93	12.07
Sand			84.86
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	72.46	15.46
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	38.9	33.56
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	14.59	24.31
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	6.95	7.64
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	4.62	2.32
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	3.82	0.81
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	3.06	0.75
Silt and Clay (Measurements in the Clay fraction are noted)			3.06
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	2.74	0.33
Hydrometer Test	0.0532	2.14	0.6
Hydrometer Test	0.0381	1.16	0.98
Hydrometer Test	0.0270	1.16	0
Hydrometer Test	0.0191	1.16	0
Hydrometer Test	0.0141	0.43	0.73
Hydrometer Test	0.0099	0.43	0
Hydrometer Test	0.0070	0.43	0
Hydrometer Test	0.0057	0.43	0
Hydrometer Test Clay	0.0050	0.43	0
Hydrometer Test Clay	0.0035	0.43	0
Hydrometer Test		0.43	0
Hydrometer Test		0.43	0

Grain Size Summary	Percent of Total Sample
Gravel	12.1
Sand	84.9
Coarse sand	49.0
Medium sand	34.3
Fine sand	1.6
Silt	2.6
Clay	0.4

Case Narrative for Sample ID: BL-CS-JC01-110111 (A11K058-06)

No difficulty dispersing the fraction passing the No. 10 sieve.
Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.
The assumed specific gravity used in the calculations was 2.65.
Hydrometer readings for 1, 2, 4, and 8 minutes are estimated due to the presence of foam.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-JC01-110111 MSMSD (A11K058-07)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			14.05
Retained on No. 4 sieve	4.75	85.95	14.05
Sand			82.78
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	68.37	17.58
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	32.57	35.81
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	12.99	19.57
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	6.74	6.25
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	4.7	2.04
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	3.91	0.79
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	3.17	0.74
Silt and Clay (Measurements in the Clay fraction are noted)			3.17
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	2.77	0.4
Hydrometer Test	0.0531	2.45	0.32
Hydrometer Test	0.0376	2	0.45
Hydrometer Test	0.0270	1.32	0.68
Hydrometer Test	0.0191	1.09	0.23
Hydrometer Test	0.0140	0.64	0.45
Hydrometer Test	0.0099	0.64	0
Hydrometer Test	0.0070	0.64	0
Hydrometer Test	0.0057	0.41	0.23
Hydrometer Test	Clay	0.0050	0.4
Hydrometer Test	Clay	0.0035	0.38
Hydrometer Test	Clay	0.0029	0
Hydrometer Test	Clay	0.0014	0.38

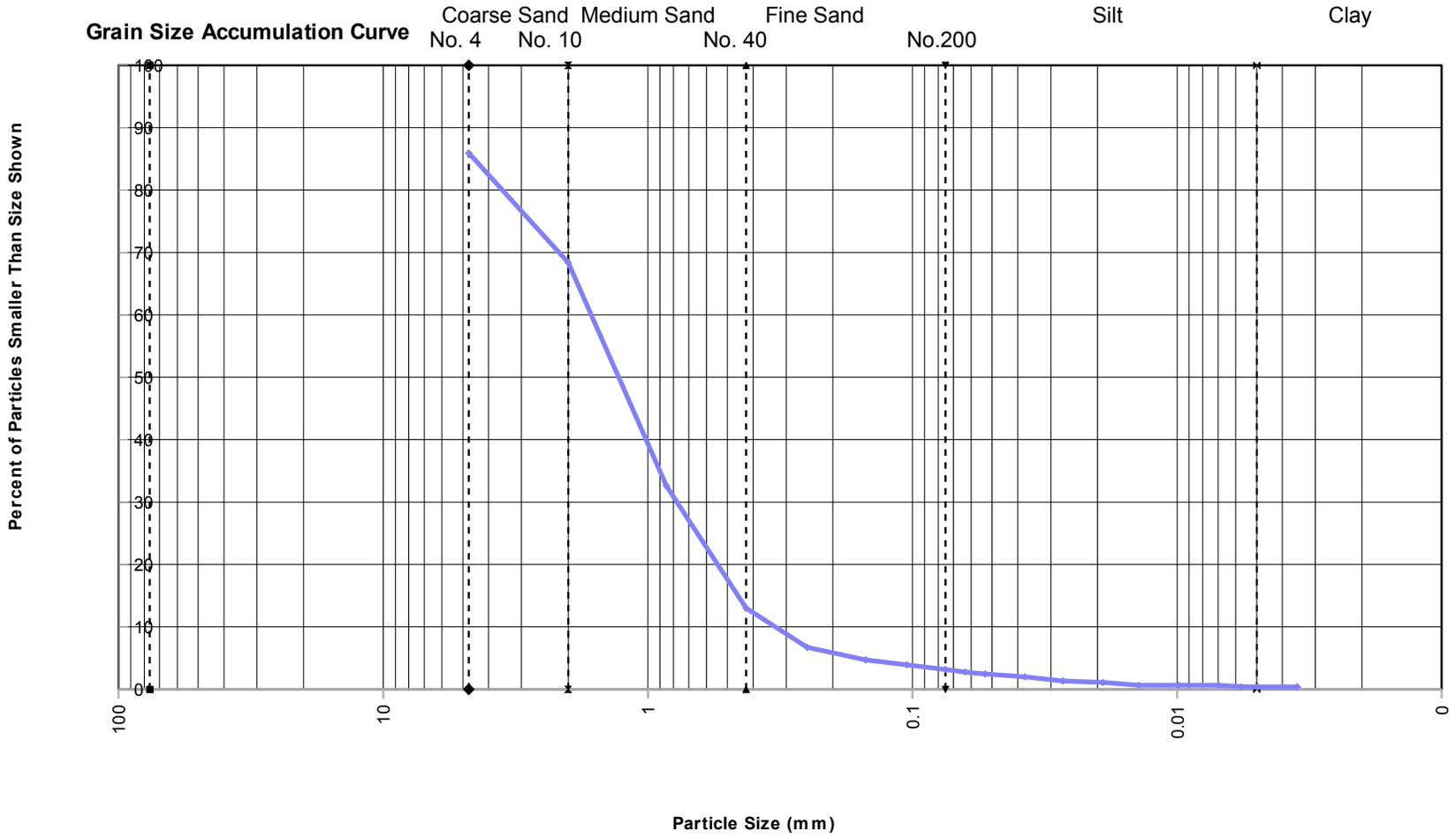
Grain Size Summary	Percent of Total Sample
Gravel	14.1
Sand	82.8
Coarse sand	53.4
Medium sand	27.9
Fine sand	1.5
Silt	2.8
Clay	0.4

Case Narrative for Sample ID: BL-CS-JC01-110111 MSMSD (A11K058-07)

No difficulty dispersing the fraction passing the No. 10 sieve.
 Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.
 The assumed specific gravity used in the calculations was 2.65.
 Hydrometer readings for 1, 2, 4, and 8 minutes are estimated due to the presence of foam.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified



Sample ID:		BL-CS-JC01-110111 MSMSD (A11K058-07)		
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Angular	Hard and Durable	SAND with trace Gravel

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: BL-CS-EC04-110111 (A11K058-08)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			18.41
Retained on No. 4 sieve	4.75	81.59	18.41
Sand			79.86
Coarse sand, passing No. 4 sieve and retained on No. 10 sieve	2.00	35.13	46.46
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	8.92	26.21
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	4.84	4.08
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	3.72	1.12
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	2.78	0.95
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	2.23	0.55
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	1.73	0.50
Silt and Clay (Measurements in the Clay fraction are noted)			1.73
Silt passing No. 200 sieve and retained on No. 230 sieve	0.0630	1.51	0.22
Hydrometer Test	0.0531	0.66	0.85
Hydrometer Test	0.0379	0.44	0.22
Hydrometer Test	0.0268	0.38	0.06
Hydrometer Test	0.0191	0.21	0.17
Hydrometer Test	0.0140	0.16	0.06
Hydrometer Test	0.0099	0.16	0
Hydrometer Test	0.0070	0.1	0.06
Hydrometer Test	0.0057	0.1	0
Hydrometer Test	Clay	0.0050	0
Hydrometer Test	Clay	0.0035	0.01
Hydrometer Test	Clay	0.0029	0.01
Hydrometer Test	Clay	0.0014	0.05

Grain Size Summary	Percent of Total Sample
Gravel	18.4
Sand	79.9
Coarse sand	72.7
Medium sand	6.1
Fine sand	1.0
Silt	1.6
Clay	0.1

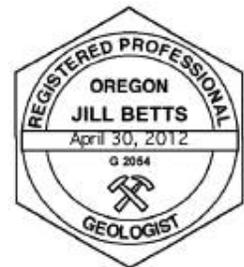
Case Narrative for Sample ID: BL-CS-EC04-110111 (A11K058-08)

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.

Hydrometer readings for 1, 2, 4, and 8 minutes are estimated due to the presence of foam.



Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Wednesday, January 4, 2012

Kim Jones
Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

RE: Blue Ledge Mine / 2010-084

Enclosed are the results of analyses for work order A11K062, which was received by the laboratory on 11/3/2011 at 9:00:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BL-DW-541-110111	A11K062-01	Water	11/01/11 14:29	11/03/11 09:00
BL-DW-541-110111MSMSD	A11K062-02	Water	11/01/11 14:29	11/03/11 09:00
BL-DW-17607-110111	A11K062-03	Water	11/01/11 14:42	11/03/11 09:00
BL-DW-17607-110111DUP	A11K062-04	Water	11/01/11 14:42	11/03/11 09:00
BL-DW-462-110111	A11K062-05	Water	11/01/11 14:49	11/03/11 09:00
BL-SW-JC10-110111	A11K062-06	Water	11/01/11 11:19	11/03/11 09:00
BL-SW-JC10-110111MSMSD	A11K062-07	Water	11/01/11 11:19	11/03/11 09:00
BL-SW-JC09-110111	A11K062-08	Water	11/01/11 10:56	11/03/11 09:00
BL-SW-JC08-110111	A11K062-09	Water	11/01/11 11:50	11/03/11 09:00
BL-SW-JC08-110111DUP	A11K062-10	Water	11/01/11 11:50	11/03/11 09:00
BL-SW-EC06-110111	A11K062-11	Water	11/01/11 13:29	11/03/11 09:00

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-541-110111 (A11K062-01)			Matrix: Water					
Batch: 1111076								
Sulfate	17.4	---	1.00	mg/L	1	11/03/11 18:24	300.0/9056A	
BL-DW-541-110111MSMSD (A11K062-02)			Matrix: Water					
Batch: 1111076								
Sulfate	17.4	---	1.00	mg/L	1	11/03/11 19:25	300.0/9056A	
BL-DW-17607-110111 (A11K062-03)			Matrix: Water					
Batch: 1111076								
Sulfate	21.3	---	1.00	mg/L	1	11/03/11 19:46	300.0/9056A	
BL-DW-17607-110111DUP (A11K062-04)			Matrix: Water					
Batch: 1111076								
Sulfate	21.2	---	1.00	mg/L	1	11/03/11 20:06	300.0/9056A	
BL-DW-462-110111 (A11K062-05RE1)			Matrix: Water					
Batch: 1111076								
Sulfate	73.0	---	5.00	mg/L	5	11/04/11 00:11	300.0/9056A	
BL-SW-JC10-110111 (A11K062-06)			Matrix: Water					
Batch: 1111076								
Sulfate	4.73	---	1.00	mg/L	1	11/03/11 20:47	300.0/9056A	
BL-SW-JC10-110111MSMSD (A11K062-07)			Matrix: Water					
Batch: 1111076								
Sulfate	4.72	---	1.00	mg/L	1	11/03/11 21:07	300.0/9056A	
BL-SW-JC09-110111 (A11K062-08)			Matrix: Water					
Batch: 1111076								
Sulfate	5.97	---	1.00	mg/L	1	11/03/11 21:27	300.0/9056A	
BL-SW-JC08-110111 (A11K062-09)			Matrix: Water					
Batch: 1111076								
Sulfate	4.64	---	1.00	mg/L	1	11/03/11 21:48	300.0/9056A	
BL-SW-JC08-110111DUP (A11K062-10)			Matrix: Water					
Batch: 1111076								
Sulfate	4.63	---	1.00	mg/L	1	11/03/11 22:08	300.0/9056A	
BL-SW-EC06-110111 (A11K062-11)			Matrix: Water					
Batch: 1111076								
Sulfate	5.88	---	1.00	mg/L	1	11/03/11 22:28	300.0/9056A	

Apex Laboratories



Darwin Thomas, Business Development Director

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

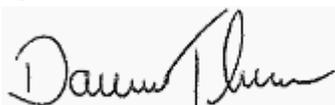
Reported:
01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-541-110111 (A11K062-01) Matrix: Water								
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	262	---	1.45	mg CaCO3/L	5	11/14/11 17:11	6020 Calc	
Batch: 1111264								
Arsenic	0.00549	---	0.00200	mg/L	1	11/14/11 16:21	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	75.7	---	0.500	"	5	11/14/11 17:11	"	FILT1
Copper	0.0121	---	0.00400	"	1	11/14/11 16:21	"	FILT1
Iron	0.766	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	17.7	---	0.0500	"	"	"	"	FILT1
Zinc	0.0504	---	0.00400	"	"	"	"	FILT1
BL-DW-541-110111MSMSD (A11K062-02) Matrix: Water								
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	272	---	1.45	mg CaCO3/L	5	11/14/11 17:14	6020 Calc	
Batch: 1111264								
Arsenic	0.00589	---	0.00200	mg/L	1	11/14/11 16:24	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	79.6	---	0.500	"	5	11/14/11 17:14	"	FILT1
Copper	0.0118	---	0.00400	"	1	11/14/11 16:24	"	FILT1
Iron	0.759	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	17.7	---	0.0500	"	"	"	"	FILT1
Zinc	0.0392	---	0.00400	"	"	"	"	FILT1
BL-DW-17607-110111 (A11K062-03) Matrix: Water								
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	284	---	1.45	mg CaCO3/L	5	11/14/11 17:17	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	1	11/14/11 16:26	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	72.6	---	0.500	"	5	11/14/11 17:17	"	FILT1
Copper	ND	---	0.00400	"	1	11/14/11 16:26	"	FILT1
Iron	0.728	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1

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Project Number: 2010-084
Project Manager: Kim Jones

Reported:
01/04/12 10:07

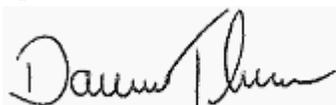
ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-17607-110111 (A11K062-03)			Matrix: Water					
Magnesium	25.0	---	0.0500	mg/L	1	"	EPA 6020 (Diss)	FILT1
Zinc	0.00896	---	0.00400	"	"	"	"	FILT1
BL-DW-17607-110111DUP (A11K062-04)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	278	---	1.45	mg CaCO3/L	5	11/14/11 17:20	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	1	11/14/11 16:29	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	70.6	---	0.500	"	5	11/14/11 17:20	"	FILT1
Copper	0.0163	---	0.00400	"	1	11/14/11 16:29	"	FILT1
Iron	0.704	---	0.0500	"	"	"	"	FILT1
Lead	0.00122	---	0.00100	"	"	"	"	FILT1
Magnesium	24.8	---	0.0500	"	"	"	"	FILT1
Zinc	0.0142	---	0.00400	"	"	"	"	FILT1
BL-DW-462-110111 (A11K062-05)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	237	---	1.45	mg CaCO3/L	5	11/14/11 17:23	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	1	11/14/11 16:32	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	77.3	---	0.500	"	5	11/14/11 17:23	"	FILT1
Copper	0.0119	---	0.00400	"	1	11/14/11 16:32	"	FILT1
Iron	0.748	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	10.7	---	0.0500	"	"	"	"	FILT1
Zinc	0.0310	---	0.00400	"	"	"	"	FILT1
BL-SW-JC10-110111 (A11K062-06)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	33.1	---	0.456	mg CaCO3/L	1	11/14/11 16:35	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	"	"	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	10.0	---	0.100	"	"	"	"	FILT1

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Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

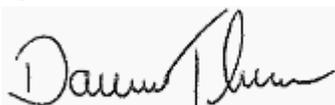
Reported:
 01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-SW-JC10-110111 (A11K062-06)			Matrix: Water					
Copper	ND	---	0.00400	mg/L	1	"	EPA 6020 (Diss)	FILT1
Iron	0.0875	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	1.94	---	0.0500	"	"	"	"	FILT1
Zinc	0.0165	---	0.00400	"	"	"	"	FILT1
BL-SW-JC10-110111MSMSD (A11K062-07)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	33.0	---	0.456	mg CaCO3/L	1	11/14/11 16:38	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	"	"	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	10.0	---	0.100	"	"	"	"	FILT1
Copper	ND	---	0.00400	"	"	"	"	FILT1
Iron	0.0856	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	1.94	---	0.0500	"	"	"	"	FILT1
Zinc	0.0168	---	0.00400	"	"	"	"	FILT1
BL-SW-JC09-110111 (A11K062-08)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	33.2	---	0.456	mg CaCO3/L	1	11/14/11 16:41	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	"	"	EPA 6020 (Diss)	FILT1
Cadmium	0.000300	---	0.000200	"	"	"	"	FILT1
Calcium	10.1	---	0.100	"	"	"	"	FILT1
Copper	0.00957	---	0.00400	"	"	"	"	FILT1
Iron	0.0817	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	1.93	---	0.0500	"	"	"	"	FILT1
Zinc	0.0664	---	0.00400	"	"	"	"	FILT1
BL-SW-JC08-110111 (A11K062-09)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	35.8	---	0.456	mg CaCO3/L	1	11/14/11 16:56	6020 Calc	
Batch: 1111264								

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-SW-JC08-110111 (A11K062-09)			Matrix: Water					
Arsenic	ND	---	0.00200	mg/L	1	"	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	10.7	---	0.100	"	"	"	"	FILT1
Copper	ND	---	0.00400	"	"	"	"	FILT1
Iron	0.0933	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	2.21	---	0.0500	"	"	"	"	FILT1
Zinc	ND	---	0.00400	"	"	"	"	FILT1
BL-SW-JC08-110111DUP (A11K062-10)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	35.5	---	0.456	mg CaCO3/L	1	11/14/11 16:59	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	"	"	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	10.6	---	0.100	"	"	"	"	FILT1
Copper	ND	---	0.00400	"	"	"	"	FILT1
Iron	0.0931	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	2.18	---	0.0500	"	"	"	"	FILT1
Zinc	ND	---	0.00400	"	"	"	"	FILT1
BL-SW-EC06-110111 (A11K062-11)			Matrix: Water					
Batch: [CALC]								
Hardness (Calc by 6020) - Dissolved	70.8	---	0.456	mg CaCO3/L	1	11/14/11 17:02	6020 Calc	
Batch: 1111264								
Arsenic	ND	---	0.00200	mg/L	"	"	EPA 6020 (Diss)	FILT1
Cadmium	ND	---	0.000200	"	"	"	"	FILT1
Calcium	18.2	---	0.100	"	"	"	"	FILT1
Copper	ND	---	0.00400	"	"	"	"	FILT1
Iron	0.176	---	0.0500	"	"	"	"	FILT1
Lead	ND	---	0.00100	"	"	"	"	FILT1
Magnesium	6.13	---	0.0500	"	"	"	"	FILT1
Zinc	ND	---	0.00400	"	"	"	"	FILT1

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

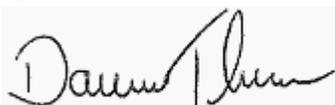
Reported:
 01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-541-110111 (A11K062-01) Matrix: Water								
Batch: 1111087								
Total Alkalinity	259	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	259	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	301	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-DW-541-110111MSMSD (A11K062-02) Matrix: Water								
Batch: 1111087								
Total Alkalinity	261	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	261	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	295	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-DW-17607-110111 (A11K062-03) Matrix: Water								
Batch: 1111087								
Total Alkalinity	268	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	268	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	293	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-DW-17607-110111DUP (A11K062-04) Matrix: Water								
Batch: 1111087								
Total Alkalinity	272	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	272	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-DW-17607-110111DUP (A11K062-04)			Matrix: Water					
Total Dissolved Solids	304	---	10.0	mg/L	1	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-DW-462-110111 (A11K062-05)			Matrix: Water					
Batch: 1111087								
Total Alkalinity	172	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	172	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	338	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	5.00	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-SW-JC10-110111 (A11K062-06)			Matrix: Water					
Batch: 1111087								
Total Alkalinity	32.0	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	32.0	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	51.0	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-SW-JC10-110111MSMSD (A11K062-07)			Matrix: Water					
Batch: 1111087								
Total Alkalinity	31.8	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	31.8	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	48.0	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-SW-JC09-110111 (A11K062-08)			Matrix: Water					
Batch: 1111087								

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Darwin Thomas, Business Development Director

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting		Dilution	Date Analyzed	Method	Notes
			Limit	Units				
BL-SW-JC09-110111 (A11K062-08)			Matrix: Water					
Total Alkalinity	31.0	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	31.0	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	41.0	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-SW-JC08-110111 (A11K062-09)			Matrix: Water					
Batch: 1111087								
Total Alkalinity	32.4	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	32.4	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	35.0	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-SW-JC08-110111DUP (A11K062-10)			Matrix: Water					
Batch: 1111087								
Total Alkalinity	45.4	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	45.4	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	35.0	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	"	"	11/04/11 13:15	SM 2540 D	
BL-SW-EC06-110111 (A11K062-11)			Matrix: Water					
Batch: 1111087								
Total Alkalinity	61.0	---	20.0	mg CaCO3/L	1	11/04/11 15:41	SM 2320 B	
Bicarbonate Alkalinity	61.0	---	20.0	"	"	"	"	
Carbonate Alkalinity	ND	---	20.0	"	"	"	"	
Hydroxide Alkalinity	ND	---	20.0	"	"	"	"	
Batch: 1111089								
Total Dissolved Solids	88.0	---	10.0	mg/L	"	11/04/11 08:38	SM 2540 C	

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
BL-SW-EC06-110111 (A11K062-11)			Matrix: Water					
Batch: 1111090								
Total Suspended Solids	ND	---	5.00	mg/L	1	11/04/11 13:15	SM 2540 D	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
01/04/12 10:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Anions by EPA 300.0/9056A (Ion Chromatography)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111076 - Method Prep: Aq						Water						
Blank (1111076-BLK1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 15:21						
300.0/9056A												
Sulfate	ND	---	1.00	mg/L	1	---	---	---	---	---	---	
LCS (1111076-BS1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 15:41						
300.0/9056A												
Sulfate	4.00	---	1.00	mg/L	1	4.00	---	100	90-110%	---	---	
Duplicate (1111076-DUP1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 16:22						
QC Source Sample: Other (A11K056-02)												
300.0/9056A												
Sulfate	ND	---	1.00	mg/L	1	---	ND	---	---	---	15%	
Duplicate (1111076-DUP2)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 23:30						
QC Source Sample: BL-SW-EC06-110111 (A11K062-11)												
300.0/9056A												
Sulfate	5.88	---	1.00	mg/L	1	---	5.88	---	---	0.02	15%	
Matrix Spike (1111076-MS1)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 16:42						
QC Source Sample: Other (A11K056-02)												
300.0/9056A												
Sulfate	4.04	---	1.11	mg/L	1	4.44	ND	91	80-120%	---	---	
Matrix Spike (1111076-MS2)						Prepared: 11/03/11 14:21 Analyzed: 11/03/11 23:50						
QC Source Sample: BL-SW-EC06-110111 (A11K062-11)												
300.0/9056A												
Sulfate	10.2	---	1.11	mg/L	1	4.44	5.88	97	80-120%	---	---	

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Darwin Thomas, Business Development Director

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Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

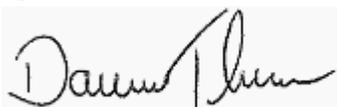
Reported:
01/04/12 10:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111264 - EPA 3015A - Dissolved						Water						
Blank (1111264-BLK1)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:45						
EPA 6020 (Diss)												
Arsenic	ND	---	0.00200	mg/L	1	---	---	---	---	---	---	A-01
Cadmium	ND	---	0.000200	"	"	---	---	---	---	---	---	A-01
Calcium	ND	---	0.100	"	"	---	---	---	---	---	---	A-01
Copper	ND	---	0.00400	"	"	---	---	---	---	---	---	A-01
Iron	ND	---	0.0500	"	"	---	---	---	---	---	---	A-01
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	A-01
Magnesium	ND	---	0.0500	"	"	---	---	---	---	---	---	A-01
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	A-01
Blank (1111264-BLK2)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:48						
EPA 6020 (Diss)												
Arsenic	ND	---	0.00200	mg/L	1	---	---	---	---	---	---	A-02, FILT1
Cadmium	ND	---	0.000200	"	"	---	---	---	---	---	---	A-02, FILT1
Calcium	ND	---	0.100	"	"	---	---	---	---	---	---	A-02, FILT1
Copper	ND	---	0.00400	"	"	---	---	---	---	---	---	A-02, FILT1
Iron	ND	---	0.0500	"	"	---	---	---	---	---	---	A-02, FILT1
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	A-02, FILT1
Magnesium	ND	---	0.0500	"	"	---	---	---	---	---	---	A-02, FILT1
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	A-02, FILT1
Blank (1111264-BLK3)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:51						
EPA 6020 (Diss)												
Arsenic	ND	---	0.00200	mg/L	1	---	---	---	---	---	---	A-03, FILT1
Cadmium	ND	---	0.000200	"	"	---	---	---	---	---	---	A-03, FILT1
Calcium	ND	---	0.100	"	"	---	---	---	---	---	---	A-03, FILT1
Copper	ND	---	0.00400	"	"	---	---	---	---	---	---	A-03, FILT1
Iron	ND	---	0.0500	"	"	---	---	---	---	---	---	A-03, FILT1
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	A-03, FILT1
Magnesium	ND	---	0.0500	"	"	---	---	---	---	---	---	A-03, FILT1
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	A-03, FILT1
LCS (1111264-BS1)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 15:54						
EPA 6020 (Diss)												
Arsenic	0.0537	---	0.00200	mg/L	1	0.0555	---	97	80-120%	---	---	
Cadmium	0.0568	---	0.000200	"	"	"	---	102	"	---	---	

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

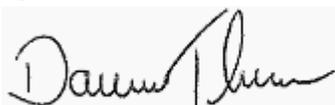
Reported:
 01/04/12 10:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111264 - EPA 3015A - Dissolved						Water						
LCS (1111264-BS1)						Prepared: 11/14/11 09:36		Analyzed: 11/14/11 15:54				
Calcium	5.56	---	0.100	mg/L	"	5.55	---	100	"	---	---	
Copper	0.0598	---	0.00400	"	"	0.0555	---	108	"	---	---	
Iron	5.52	---	0.0500	"	"	5.55	---	100	"	---	---	
Lead	0.0571	---	0.00100	"	"	0.0555	---	103	"	---	---	
Magnesium	5.62	---	0.0500	"	"	5.55	---	101	"	---	---	
Zinc	0.0546	---	0.00400	"	"	0.0555	---	98	"	---	---	
Duplicate (1111264-DUP1)						Prepared: 11/14/11 09:36		Analyzed: 11/14/11 16:00				
QC Source Sample: Other (A11K057-01)												
EPA 6020 (Diss)												
Arsenic	0.00253	---	0.00200	mg/L	1	---	0.00251	---	---	0.9	20%	
Cadmium	ND	---	0.000200	"	"	---	0.000122	---	---	***	20%	
Calcium	5.04	---	0.100	"	"	---	5.03	---	---	0.2	20%	
Copper	0.00957	---	0.00400	"	"	---	0.00926	---	---	3	20%	
Iron	0.0859	---	0.0500	"	"	---	0.0923	---	---	7	20%	
Lead	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Magnesium	1.99	---	0.0500	"	"	---	1.98	---	---	0.2	20%	
Zinc	0.0144	---	0.00400	"	"	---	0.0140	---	---	3	20%	
Matrix Spike (1111264-MS1)						Prepared: 11/14/11 09:36		Analyzed: 11/14/11 16:03				
QC Source Sample: Other (A11K057-01)												
EPA 6020 (Diss)												
Arsenic	0.0568	---	0.00200	mg/L	1	0.0555	0.00251	98	75-125%	---	---	
Cadmium	0.0575	---	0.000200	"	"	"	0.000122	103	"	---	---	
Calcium	11.0	---	0.100	"	"	5.55	5.03	108	"	---	---	
Copper	0.0694	---	0.00400	"	"	0.0555	0.00926	108	"	---	---	
Iron	5.62	---	0.0500	"	"	5.55	0.0923	100	"	---	---	
Lead	0.0570	---	0.00100	"	"	0.0555	ND	103	"	---	---	
Magnesium	7.60	---	0.0500	"	"	5.55	1.98	101	"	---	---	
Zinc	0.0685	---	0.00400	"	"	0.0555	0.0140	98	"	---	---	
Matrix Spike (1111264-MS2)						Prepared: 11/14/11 09:36		Analyzed: 11/14/11 17:05				
QC Source Sample: BL-SW-EC06-110111 (A11K062-11)												
EPA 6020 (Diss)												
Arsenic	0.0543	---	0.0100	mg/L	5	0.0555	0.000589	97	75-125%	---	---	

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Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111264 - EPA 3015A - Dissolved						Water						
Matrix Spike (1111264-MS2)						Prepared: 11/14/11 09:36 Analyzed: 11/14/11 17:05						
QC Source Sample: BL-SW-EC06-110111 (A11K062-11)												
Cadmium	0.0579	---	0.00100	mg/L	"	"	ND	104	"	---	---	
Calcium	23.9	---	0.500	"	"	5.55	18.2	101	"	---	---	
Copper	0.0576	---	0.0200	"	"	0.0555	ND	104	"	---	---	
Iron	5.69	---	0.250	"	"	5.55	0.176	99	"	---	---	
Lead	0.0580	---	0.00500	"	"	0.0555	ND	105	"	---	---	
Magnesium	11.9	---	0.250	"	"	5.55	6.13	104	"	---	---	
Zinc	0.0591	---	0.0200	"	"	0.0555	ND	106	"	---	---	

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
01/04/12 10:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111087 - Method Prep: Aq						Water						
Blank (1111087-BLK1)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
SM 2320 B												
Total Alkalinity	ND	---	20.0	mg CaCO3/L	1	---	---	---	---	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Carbonate Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	---	---	---	---	---	---	---
LCS (1111087-BS1)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
SM 2320 B												
Total Alkalinity	191	---	20.0	mg CaCO3/L	1	191	---	100	85-115%	---	---	---
Bicarbonate Alkalinity	ND	---	20.0	"	"	0.000100	---		0-200%	---	---	---
Carbonate Alkalinity	183	---	20.0	"	"	191	---	96	"	---	---	---
Hydroxide Alkalinity	ND	---	20.0	"	"	0.000100	---		"	---	---	---
Duplicate (1111087-DUP1)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
QC Source Sample: Other (A11K058-09)												
SM 2320 B												
Total Alkalinity	71.0	---	20.0	mg CaCO3/L	1	---	71.2	---	---	0.3	20%	
Bicarbonate Alkalinity	71.0	---	20.0	"	"	---	71.2	---	---	0.3	20%	
Carbonate Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	
Hydroxide Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	
Duplicate (1111087-DUP2)						Prepared: 11/04/11 08:29 Analyzed: 11/04/11 15:41						
QC Source Sample: BL-SW-EC06-110111 (A11K062-11)												
SM 2320 B												
Total Alkalinity	63.2	---	20.0	mg CaCO3/L	1	---	61.0	---	---	4	20%	
Bicarbonate Alkalinity	63.2	---	20.0	"	"	---	61.0	---	---	4	20%	
Carbonate Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	
Hydroxide Alkalinity	ND	---	20.0	"	"	---	ND	---	---	---	20%	

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 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111089 - Total Dissolved Solids						Water						
Blank (1111089-BLK1)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
SM 2540 C												
Total Dissolved Solids	ND	---	10.0	mg/L	1	---	---	---	---	---	---	---
Duplicate (1111089-DUP1)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
QC Source Sample: Other (A11K058-09)												
SM 2540 C												
Total Dissolved Solids	84.0	---	10.0	mg/L	1	---	103	---	---	20	20%	
Duplicate (1111089-DUP2)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
QC Source Sample: BL-SW-EC06-110111 (A11K062-11)												
SM 2540 C												
Total Dissolved Solids	97.0	---	10.0	mg/L	1	---	88.0	---	---	10	20%	
Reference (1111089-SRM1)						Prepared: 11/04/11 08:38 Analyzed: 11/04/11 08:38						
SM 2540 C												
Total Dissolved Solids	1000	---		mg/L	1	1000		100	90-110%	---	---	

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Darwin Thomas, Business Development Director

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 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

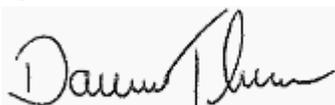
Reported:
 01/04/12 10:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111090 - Total Suspended Solids						Water						
Blank (1111090-BLK1)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	---
Duplicate (1111090-DUP1)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
QC Source Sample: Other (A11K058-09)												
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	20%	
Duplicate (1111090-DUP2)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
QC Source Sample: BL-SW-EC06-110111 (A11K062-11)												
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	20%	
Reference (1111090-SRM1)						Prepared: 11/04/11 08:50 Analyzed: 11/04/11 13:15						
SM 2540 D												
Total Suspended Solids	94.0	---		mg/L	1	100		94	90-110%	---	---	

Apex Laboratories



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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

SAMPLE PREPARATION INFORMATION

Anions by EPA 300.0/9056A (Ion Chromatography)

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111076							
A11K062-01	Water	300.0/9056A	11/01/11 14:29	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-02	Water	300.0/9056A	11/01/11 14:29	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-03	Water	300.0/9056A	11/01/11 14:42	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-04	Water	300.0/9056A	11/01/11 14:42	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-05RE1	Water	300.0/9056A	11/01/11 14:49	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-06	Water	300.0/9056A	11/01/11 11:19	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-07	Water	300.0/9056A	11/01/11 11:19	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-08	Water	300.0/9056A	11/01/11 10:56	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-09	Water	300.0/9056A	11/01/11 11:50	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-10	Water	300.0/9056A	11/01/11 11:50	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00
A11K062-11	Water	300.0/9056A	11/01/11 13:29	11/03/11 14:21	10mL/10mL	10mL/10mL	1.00

Dissolved Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A - Dissolved

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111264							
A11K062-01	Water	EPA 6020 (Diss)	11/01/11 14:29	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-02	Water	EPA 6020 (Diss)	11/01/11 14:29	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-03	Water	EPA 6020 (Diss)	11/01/11 14:42	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-04	Water	EPA 6020 (Diss)	11/01/11 14:42	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-05	Water	EPA 6020 (Diss)	11/01/11 14:49	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-06	Water	EPA 6020 (Diss)	11/01/11 11:19	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-07	Water	EPA 6020 (Diss)	11/01/11 11:19	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-08	Water	EPA 6020 (Diss)	11/01/11 10:56	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-09	Water	EPA 6020 (Diss)	11/01/11 11:50	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-10	Water	EPA 6020 (Diss)	11/01/11 11:50	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00
A11K062-11	Water	EPA 6020 (Diss)	11/01/11 13:29	11/14/11 09:36	45mL/50mL	45mL/50mL	1.00

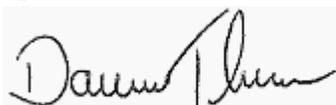
Conventional Chemistry Parameters

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111087							
A11K062-01	Water	SM 2320 B	11/01/11 14:29	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-02	Water	SM 2320 B	11/01/11 14:29	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-03	Water	SM 2320 B	11/01/11 14:42	11/04/11 08:29	50mL/50mL	50mL/50mL	NA

Apex Laboratories

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

SAMPLE PREPARATION INFORMATION

Conventional Chemistry Parameters

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A11K062-04	Water	SM 2320 B	11/01/11 14:42	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-05	Water	SM 2320 B	11/01/11 14:49	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-06	Water	SM 2320 B	11/01/11 11:19	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-07	Water	SM 2320 B	11/01/11 11:19	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-08	Water	SM 2320 B	11/01/11 10:56	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-09	Water	SM 2320 B	11/01/11 11:50	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-10	Water	SM 2320 B	11/01/11 11:50	11/04/11 08:29	50mL/50mL	50mL/50mL	NA
A11K062-11	Water	SM 2320 B	11/01/11 13:29	11/04/11 08:29	50mL/50mL	50mL/50mL	NA

Prep: Total Dissolved Solids

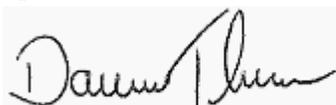
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111089							
A11K062-01	Water	SM 2540 C	11/01/11 14:29	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-02	Water	SM 2540 C	11/01/11 14:29	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-03	Water	SM 2540 C	11/01/11 14:42	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-04	Water	SM 2540 C	11/01/11 14:42	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-05	Water	SM 2540 C	11/01/11 14:49	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-06	Water	SM 2540 C	11/01/11 11:19	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-07	Water	SM 2540 C	11/01/11 11:19	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-08	Water	SM 2540 C	11/01/11 10:56	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-09	Water	SM 2540 C	11/01/11 11:50	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-10	Water	SM 2540 C	11/01/11 11:50	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA
A11K062-11	Water	SM 2540 C	11/01/11 13:29	11/04/11 08:38	1N/A/1N/A	1N/A/1N/A	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111090							
A11K062-01	Water	SM 2540 D	11/01/11 14:29	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-02	Water	SM 2540 D	11/01/11 14:29	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-03	Water	SM 2540 D	11/01/11 14:42	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-04	Water	SM 2540 D	11/01/11 14:42	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-05	Water	SM 2540 D	11/01/11 14:49	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-06	Water	SM 2540 D	11/01/11 11:19	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-07	Water	SM 2540 D	11/01/11 11:19	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-08	Water	SM 2540 D	11/01/11 10:56	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-09	Water	SM 2540 D	11/01/11 11:50	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-10	Water	SM 2540 D	11/01/11 11:50	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA
A11K062-11	Water	SM 2540 D	11/01/11 13:29	11/04/11 08:50	1N/A/1N/A	1N/A/1N/A	NA

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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
 4585 Pacheco Blvd, Suite 200 (Corporate address)
 Martinez, CA 94553

Project: **Blue Ledge Mine**
 Project Number: 2010-084
 Project Manager: Kim Jones

Reported:
 01/04/12 10:07

SAMPLE PREPARATION INFORMATION

Lab Filtration

Prep: Lab Filtration

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1111083							
A11K062-01	Water	NA	11/01/11 14:29	11/03/11 20:17	150mL/150mL		NA
A11K062-02	Water	NA	11/01/11 14:29	11/03/11 20:26	150mL/150mL		NA
A11K062-03	Water	NA	11/01/11 14:42	11/03/11 20:28	150mL/150mL		NA
A11K062-04	Water	NA	11/01/11 14:42	11/03/11 20:31	150mL/150mL		NA
A11K062-05	Water	NA	11/01/11 14:49	11/03/11 20:33	150mL/150mL		NA
A11K062-06	Water	NA	11/01/11 11:19	11/03/11 20:36	150mL/150mL		NA
A11K062-07	Water	NA	11/01/11 11:19	11/03/11 20:39	150mL/150mL		NA
A11K062-08	Water	NA	11/01/11 10:56	11/03/11 20:48	150mL/150mL		NA
A11K062-09	Water	NA	11/01/11 11:50	11/03/11 20:56	150mL/150mL		NA
A11K062-10	Water	NA	11/01/11 11:50	11/03/11 20:58	150mL/150mL		NA
A11K062-11	Water	NA	11/01/11 13:29	11/03/11 21:01	150mL/150mL		NA

Apex Laboratories



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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**
Project Number: 2010-084
Project Manager: Kim Jones

Reported:
01/04/12 10:07

Notes and Definitions

Qualifiers:

A-01 Non filtered method blank
A-02 Filtration blank from lab filter batch 1111083
A-03 Filtration blank from lab filter batch 1111257
FIL1 Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.

Notes and Conventions:

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD Relative Percent Difference
MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

--- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

*** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



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Darwin Thomas, Business Development Director

Engineering/Remediation Resource Group, Inc
4585 Pacheco Blvd, Suite 200 (Corporate address)
Martinez, CA 94553

Project: **Blue Ledge Mine**

Project Number: 2010-084
Project Manager: Kim Jones

Reported:
01/04/12 10:07

Lab# Lib#
A11K06Z **2010-084**

CHAIN OF CUSTODY

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

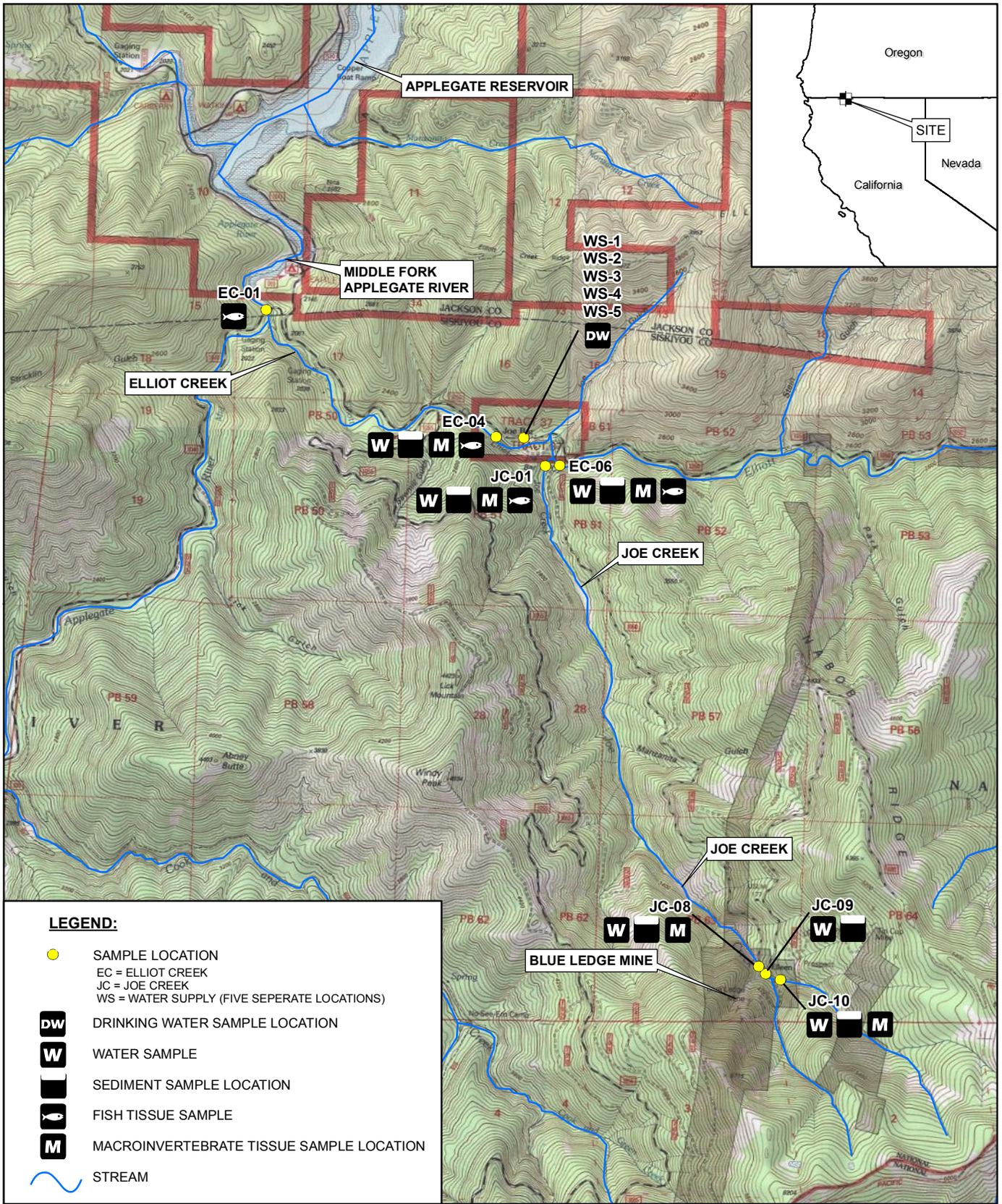
Company: ERRG		Project Name: Blue Ledge Mine		Project # 2010-084	
Address: 4585 Pacheco Blvd # 200		Phone: (923) 929-0750		Fax: (923) 929-0751	
Sampled by: Kim Jones		Project Mgr: Brian Wetzstein		Email: Kim.Jones@errg.com	
Site Location: OR WA	Other: CA	ANALYSIS REQUEST			
SAMPLE ID	BL-SW-EC06-110111	AL. SR. CR. BR. DR. (Pb, Cr, Cu, Ni, Zn, Cd, Hg, Mn, Fe, Ti, V, As)	<input checked="" type="checkbox"/>	TOTAL (Pb, Cr, Cu, Ni, Zn, Cd, Hg, Mn, Fe, Ti, V, As)	<input checked="" type="checkbox"/>
LAB ID #		TCRF Metals (B)		TCRF Metals (B)	
DATE	11/11/11	RCRA Metals (B)		RCRA Metals (B)	
TIME	13:29	609 TIO		609 TIO	
MATRIX	W	8083 PCBs		8083 PCBs	
# OF CONTAINERS	2	8370 SINI PAHs		8370 SINI PAHs	
		8270 SVOC		8270 SVOC	
		8260 BTEX		8260 BTEX	
		8260 HBDN VOCs		8260 HBDN VOCs	
		8260 VOC		8260 VOC	
		NWTR-CX		NWTR-CX	
		NWTR-DX		NWTR-DX	
		NWTR-HCID		NWTR-HCID	
Normal Turn Around Time (TAT) = 7-10 Business Days		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		SPECIAL INSTRUCTIONS:	
TAT Requested (circle)		1 Day 2 Day 3 Day 4 DAY 5 DAY Other: _____		Please analyze for metals (As, Cd, Cu, Ni, Pb, Zn) using 6020 Cd-LL.	
SAMPLES ARE HELD FOR 30 DAYS					
RELINQUISHED BY:		RECEIVED BY:			
Signature: Kim Jones	Date: 11/11	Signature: Jell	Date: 11-3-11	Time: 10:00	
Printed Name: Kim Jones	Printed Name: Jell	shipped via FedEx			
Company: ERRG	Company: APEX				

Apex Laboratories

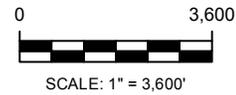


Darwin Thomas, Business Development Director

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SOURCE: "PROPOSED SAMPLING LOCATIONS", URS CORPORATION, 2010
 DUTCH CREEK, CALIFORNIA USGS 7.5' TOPO QUAD, 1981
 KANGAROO MOUNTAIN, CALIFORNIA USGS 7.5' TOPO QUAD, 1981
 SQUAW LAKES, OREGON USGS 7.5' TPO QUAD, 1983
 CARBERRY CREEK, OREGON USGS 7.5' TOPO QUAD, 1983



 Engineering/Remediation Resources Group, Inc. 4585 Pacheco Blvd, Suite 200 Martinez, California 94553 (925) 969-0750	CLIENT: USDA FOREST SERVICE	SAMPLING LOCATIONS			
	LOCATION: BLUE LEDGE MINE ROGUE RIVER-SISKIYOU NATIONAL FOREST	DRAWN BY: JJC 1/17/2012	CHECKED BY: JS 1/17/2012	PROJECT NO. 2010-084	FIG NO. L-1