

EXCELCHEM
Environmental Labs

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ELAP Certificate No. : 2119

29 June 2012

Jeff Huggins

RWQC Central Valley

11020 Sun Center Dr. #200

Rancho Cordova, CA 95670

RE: Walker Mine

Work order number:1206150

Enclosed are the results of analyses for samples received by the laboratory on 06/14/12 08:41. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WM-30	1206150-01	Water	06/12/12 10:45	06/14/12 08:41
WM-7a	1206150-02	Water	06/12/12 14:30	06/14/12 08:41
WM-6	1206150-03	Water	06/12/12 14:45	06/14/12 08:41
WM-7b	1206150-04	Water	06/12/12 14:54	06/14/12 08:41
WM-7c	1206150-05	Water	06/12/12 14:57	06/14/12 08:41
WM-1	1206150-06	Water	06/12/12 15:25	06/14/12 08:41
WM-2	1206150-07	Water	06/12/12 15:30	06/14/12 08:41
WM-19	1206150-08	Water	06/12/12 15:40	06/14/12 08:41
WM-3	1206150-09	Water	06/12/12 15:45	06/14/12 08:41
WM-5	1206150-10	Water	06/12/12 16:00	06/14/12 08:41
WM-4	1206150-11	Water	06/13/12 08:50	06/14/12 08:41
WM-9	1206150-12	Water	06/13/12 09:00	06/14/12 08:41
WM-11	1206150-13	Water	06/13/12 09:15	06/14/12 08:41
WM-12	1206150-14	Water	06/13/12 09:20	06/14/12 08:41
WM-13	1206150-15	Water	06/13/12 09:25	06/14/12 08:41
WM-17	1206150-16	Water	06/13/12 09:35	06/14/12 08:41
WM-14	1206150-17	Water	06/13/12 11:30	06/14/12 08:41
WM-15	1206150-18	Water	06/13/12 11:35	06/14/12 08:41
WM-16	1206150-19	Water	06/13/12 11:45	06/14/12 08:41
WM-18	1206150-20	Water	06/13/12 12:00	06/14/12 08:41
WM-20	1206150-21	Water	06/13/12 13:00	06/14/12 08:41

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-30 1206150-01 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	0.5	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
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Wet Chemistry

Total Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	453	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	3.66	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	296	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	254	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	5320	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	11.3	5.0	0.1	"	1	"	"	"	"	
Calcium	41600	100	79.0	"	1	"	"	"	"	
Copper	16900	5.0	0.8	"	1	"	"	"	"	
Iron	6720	20.0	11.5	"	1	"	"	"	"	
Magnesium	7210	50.0	15.6	"	1	"	"	"	"	
Potassium	2290	100	46.8	"	1	"	"	"	"	
Sodium	6000	200	120	"	1	"	"	"	"	
Zinc	860	10.0	0.3	"	1	"	"	"	"	

Dissolved Metals

Dissolved Aluminum	4710	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	10.6	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	16600	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	222	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	907	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-30
1206150-01RE1 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Sulfate as SO4	228	5.0	0.3	mg/L	10	AVF0155	06/14/12	06/14/12	EPA 300.0	
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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-7a
1206150-02 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	2.1	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	66.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	66.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	123	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.54	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	47.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	62.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	13500	100	79.0	"	1	"	"	"	"	
Copper	29.2	5.0	0.8	"	1	"	"	"	"	
Iron	601	20.0	11.5	"	1	"	"	"	"	
Magnesium	6160	50.0	15.6	"	1	"	"	"	"	
Potassium	803	100	46.8	"	1	"	"	"	"	
Sodium	6930	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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**WM-7a
1206150-02 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	21.8	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	407	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-6 1206150-03 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	26.1	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	62.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	62.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	166	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.52	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	102	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	72.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	21600	100	79.0	"	1	"	"	"	"	
Copper	54.7	5.0	0.8	"	1	"	"	"	"	
Iron	238	20.0	11.5	"	1	"	"	"	"	
Magnesium	3560	50.0	15.6	"	1	"	"	"	"	
Potassium	1740	100	46.8	"	1	"	"	"	"	
Sodium	10600	200	120	"	1	"	"	"	"	
Zinc	12.8	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-6
1206150-03 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	30.7	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	43.5	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	17.5	10.0	0.3	"	1	"	"	"	"	

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Excelchem Environmental Labs

RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-7b
1206150-04 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	2.2	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	66.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	66.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	123	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	8.06	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	74.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	58.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	13100	100	79.0	"	1	"	"	"	"	
Copper	24.2	5.0	0.8	"	1	"	"	"	"	
Iron	424	20.0	11.5	"	1	"	"	"	"	
Magnesium	5960	50.0	15.6	"	1	"	"	"	"	
Potassium	894	100	46.8	"	1	"	"	"	"	
Sodium	6970	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-7b
1206150-04 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	19.0	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	265	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-7c 1206150-05 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	3.4	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	48.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	48.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	91.7	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.11	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	44.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	40.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	10500	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	585	20.0	11.5	"	1	"	"	"	"	
Magnesium	3240	50.0	15.6	"	1	"	"	"	"	
Potassium	940	100	46.8	"	1	"	"	"	"	
Sodium	7730	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-7c
1206150-05 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	10.2	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	424	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	20.7	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-1 1206150-06 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	0.9	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	64.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	64.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	116	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.13	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	67.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	50.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	14.7	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	11800	100	79.0	"	1	"	"	"	"	
Copper	85.0	5.0	0.8	"	1	"	"	"	"	
Iron	104	20.0	11.5	"	1	"	"	"	"	
Magnesium	4740	50.0	15.6	"	1	"	"	"	"	
Potassium	797	100	46.8	"	1	"	"	"	"	
Sodium	10100	200	120	"	1	"	"	"	"	
Zinc	26.6	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-1
1206150-06 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	11.4	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	61.1	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	27.6	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-2 1206150-07 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	ND	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	78.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	78.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	140	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.47	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	78.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	70.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	80.1	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	14700	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	107	20.0	11.5	"	1	"	"	"	"	
Magnesium	7410	50.0	15.6	"	1	"	"	"	"	
Potassium	709	100	46.8	"	1	"	"	"	"	
Sodium	6100	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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 Rancho Cordova, CA 95670

Project: Walker Mine
 Project Number: [none]
 Project Manager: Jeff Huggins

Date Reported:
 06/29/12 15:18

**WM-2
 1206150-07 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	5.0	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-19
1206150-08 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
Ion Chromatography										
Chloride	0.5	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Wet Chemistry										
Total Alkalinity	42.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	42.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	147	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.39	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	85.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	70.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	
Total Recoverable Metals										
Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	15800	100	79.0	"	1	"	"	"	"	
Copper	552	5.0	0.8	"	1	"	"	"	"	
Iron	451	20.0	11.5	"	1	"	"	"	"	
Magnesium	4980	50.0	15.6	"	1	"	"	"	"	
Potassium	1480	100	46.8	"	1	"	"	"	"	
Sodium	10100	200	120	"	1	"	"	"	"	
Zinc	49.0	10.0	0.3	"	1	"	"	"	"	
Dissolved Metals										
Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	217	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	101	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	35.7	10.0	0.3	"	1	"	"	"	"	

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**WM-19
1206150-08RE1 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Sulfate as SO4	28.8	1.0	0.05	mg/L	2	AVF0155	06/14/12	06/14/12	EPA 300.0	
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11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-3 1206150-09 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	0.6	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	68.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	68.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	126	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.34	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	68.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	64.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	101	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	13500	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	1050	20.0	11.5	"	1	"	"	"	"	
Magnesium	6680	50.0	15.6	"	1	"	"	"	"	
Potassium	710	100	46.8	"	1	"	"	"	"	
Sodium	6130	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Project: Walker Mine
 Project Number: [none]
 Project Manager: Jeff Huggins

Date Reported:
 06/29/12 15:18

WM-3 1206150-09 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	ND	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	260	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-5 1206150-10 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	ND	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	44.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	44.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	74.8	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.05	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	26.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	34.0	5.00	2.86	"	1	AVF0279	06/27/12	06/27/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	8160	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	483	20.0	11.5	"	1	"	"	"	"	
Magnesium	2860	50.0	15.6	"	1	"	"	"	"	
Potassium	742	100	46.8	"	1	"	"	"	"	
Sodium	7060	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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WM-5
1206150-10 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	6.6	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	298	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-4
1206150-11 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	1.8	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	70.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	70.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	128	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.38	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	70.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	64.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	13300	100	79.0	"	1	"	"	"	"	
Copper	40.8	5.0	0.8	"	1	"	"	"	"	
Iron	400	20.0	11.5	"	1	"	"	"	"	
Magnesium	6450	50.0	15.6	"	1	"	"	"	"	
Potassium	660	100	46.8	"	1	"	"	"	"	
Sodium	6440	200	120	"	1	"	"	"	"	
Zinc	13.3	10.0	0.3	"	1	"	"	"	"	

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WM-4
1206150-11 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	19.4	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	178	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-9 1206150-12 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	3.9	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	54.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	54.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	101	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.40	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	63.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	46.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	11300	100	79.0	"	1	"	"	"	"	
Copper	5.8	5.0	0.8	"	1	"	"	"	"	
Iron	576	20.0	11.5	"	1	"	"	"	"	
Magnesium	3700	50.0	15.6	"	1	"	"	"	"	
Potassium	926	100	46.8	"	1	"	"	"	"	
Sodium	7460	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-9
1206150-12 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	6.6	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	331	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-11 1206150-13 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	0.9	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	22.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	22.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	37.4	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	6.78	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	24.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	18.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	3930	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	ND	20.0	11.5	"	1	"	"	"	"	
Magnesium	1360	50.0	15.6	"	1	"	"	"	"	
Potassium	401	100	46.8	"	1	"	"	"	"	
Sodium	4330	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-11
1206150-13 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	56.5	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	ND	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	21.7	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	21.9	10.0	0.3	"	1	"	"	"	"	

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**WM-12
1206150-14 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	0.6	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	22.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	22.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	35.0	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	5.93	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	16.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	16.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/19/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	3520	100	79.0	"	1	"	"	"	"	
Copper	5.7	5.0	0.8	"	1	"	"	"	"	
Iron	31.3	20.0	11.5	"	1	"	"	"	"	
Magnesium	1740	50.0	15.6	"	1	"	"	"	"	
Potassium	313	100	46.8	"	1	"	"	"	"	
Sodium	2650	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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WM-12
1206150-14 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	9.6	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	20.2	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-13 1206150-15 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	ND	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	46.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	46.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	79.8	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	6.97	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	62.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	40.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/20/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	9030	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	ND	20.0	11.5	"	1	"	"	"	"	
Magnesium	3860	50.0	15.6	"	1	"	"	"	"	
Potassium	388	100	46.8	"	1	"	"	"	"	
Sodium	4780	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-13
1206150-15 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	60.3	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	7.4	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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WM-17 1206150-16 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	0.7	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	84.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	84.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	155	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.63	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	92.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	72.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/20/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	17200	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	ND	20.0	11.5	"	1	"	"	"	"	
Magnesium	6930	50.0	15.6	"	1	"	"	"	"	
Potassium	1480	100	46.8	"	1	"	"	"	"	
Sodium	7670	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-17
1206150-16 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	ND	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-14
1206150-17 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	0.5	0.5	0.05	mg/L	1	AVF0154	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	3.5	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	82.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	82.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	158	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.47	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	83.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	76.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/20/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	26000	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	ND	20.0	11.5	"	1	"	"	"	"	
Magnesium	2390	50.0	15.6	"	1	"	"	"	"	
Potassium	845	100	46.8	"	1	"	"	"	"	
Sodium	5950	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-14
1206150-17 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	ND	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-15
1206150-18 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	0.5	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	66.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	66.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	121	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.53	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	68.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	58.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	57.4	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/20/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	14000	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	28.1	20.0	11.5	"	1	"	"	"	"	
Magnesium	5420	50.0	15.6	"	1	"	"	"	"	
Potassium	968	100	46.8	"	1	"	"	"	"	
Sodium	6190	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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**WM-15
1206150-18 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	ND	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-16 1206150-19 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	ND	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	74.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	74.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	135	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.51	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	77.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	64.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/20/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	15700	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	ND	20.0	11.5	"	1	"	"	"	"	
Magnesium	6030	50.0	15.6	"	1	"	"	"	"	
Potassium	1080	100	46.8	"	1	"	"	"	"	
Sodium	6640	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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**WM-16
1206150-19 (Water)**

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	ND	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	19.5	10.0	0.3	"	1	"	"	"	"	

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Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

WM-18 1206150-20 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	0.9	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	80.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	80.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	150	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.70	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	85.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	70.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0166	06/18/12	06/20/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	16800	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	27.4	20.0	11.5	"	1	"	"	"	"	
Magnesium	6620	50.0	15.6	"	1	"	"	"	"	
Potassium	1640	100	46.8	"	1	"	"	"	"	
Sodium	8210	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-18
1206150-20 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0173	06/19/12	06/22/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	76.4	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	ND	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	23.5	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-20 1206150-21 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Chloride	ND	0.5	0.05	mg/L	1	AVF0155	06/14/12	06/14/12	EPA 300.0	
Sulfate as SO4	4.8	0.5	0.03	"	1	"	"	"	"	

Wet Chemistry

Total Alkalinity	54.0	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
Bicarbonate Alkalinity	54.0	5.00	2.37	"	1	"	"	"	"	
Carbonate Alkalinity	ND	5.00	2.37	"	1	"	"	"	"	
Specific Conductance (EC)	106	5.00	1.09	uS/cm	1	AVF0144	06/14/12	06/14/12	EPA 120.1	
Hydroxide Alkalinity	ND	5.00	2.37	mg/L	1	AVF0196	06/20/12	06/20/12	SM2320B	
pH	7.55	0.100	0.100	pH Units	1	AVF0142	06/14/12	06/15/12	SM 4500-H+ B	
Total Dissolved Solids	57.0	15.0	7.68	mg/L	1	AVF0241	06/19/12	06/24/12	SM 2540C	
Total Hardness	44.0	5.00	2.86	"	1	AVF0226	06/21/12	06/21/12	SM2340B	

Total Recoverable Metals

Aluminum	ND	50.0	24.5	ug/l	1	AVF0175	06/19/12	06/20/12	EPA 6010B	
Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Calcium	12300	100	79.0	"	1	"	"	"	"	
Copper	ND	5.0	0.8	"	1	"	"	"	"	
Iron	181	20.0	11.5	"	1	"	"	"	"	
Magnesium	3320	50.0	15.6	"	1	"	"	"	"	
Potassium	1330	100	46.8	"	1	"	"	"	"	
Sodium	10900	200	120	"	1	"	"	"	"	
Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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WM-20
1206150-21 (Water)

Analyte	Result	Reporting Limit	MDL	Units	DF	Batch	Date Prepared	Date Analyzed	Method	Notes
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Dissolved Metals

Dissolved Aluminum	ND	50.0	24.5	ug/l	1	AVF0178	06/19/12	06/21/12	EPA 6010B	
Dissolved Arsenic	ND	5.0	1.0	"	1	"	"	"	"	
Dissolved Cadmium	ND	5.0	0.1	"	1	"	"	"	"	
Dissolved Copper	ND	5.0	0.8	"	1	"	"	"	"	
Dissolved Iron	108	20.0	11.5	"	1	"	"	"	"	
Dissolved Zinc	ND	10.0	0.3	"	1	"	"	"	"	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Ion Chromatography - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0154 - EPA 300.0

Blank (AVF0154-BLK1)

Prepared & Analyzed: 06/14/12

Chloride	ND	0.5		mg/L						
Sulfate as SO4	ND	0.5		"						

LCS (AVF0154-BS1)

Prepared & Analyzed: 06/14/12

Chloride	9.9	0.5		mg/L	10.0	99.0	80-120			
Sulfate as SO4	9.8	0.5		"	10.0	98.0	80-120			

LCS Dup (AVF0154-BSD1)

Prepared & Analyzed: 06/14/12

Chloride	9.9	0.5		mg/L	10.0	98.7	80-120	0.253	20	
Sulfate as SO4	9.9	0.5		"	10.0	98.9	80-120	0.945	20	

Duplicate (AVF0154-DUP1)

Source: 1206141-03

Prepared & Analyzed: 06/14/12

Chloride	8.6	0.5		mg/L		8.8		1.39	20	
Sulfate as SO4	8.5	0.5		"		8.4		1.79	20	

Matrix Spike (AVF0154-MS1)

Source: 1206150-17

Prepared & Analyzed: 06/14/12

Chloride	11.3	0.5		mg/L	10.0	0.5	109	75-125		
Sulfate as SO4	14.8	0.5		"	10.0	3.5	113	75-125		

Matrix Spike Dup (AVF0154-MSD1)

Source: 1206150-17

Prepared & Analyzed: 06/14/12

Chloride	11.4	0.5		mg/L	10.0	0.5	109	75-125	0.132	20
Sulfate as SO4	14.6	0.5		"	10.0	3.5	111	75-125	0.965	20

Batch AVF0155 - EPA 300.0

Blank (AVF0155-BLK1)

Prepared & Analyzed: 06/14/12

Chloride	ND	0.5		mg/L						
Sulfate as SO4	ND	0.5		"						

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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Ion Chromatography - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0155 - EPA 300.0

LCS (AVF0155-BS1)

Prepared & Analyzed: 06/14/12

Chloride	10.0	0.5		mg/L	10.0		100	80-120		
Sulfate as SO4	9.8	0.5		"	10.0		98.5	80-120		

LCS Dup (AVF0155-BSD1)

Prepared & Analyzed: 06/14/12

Chloride	9.9	0.5		mg/L	10.0		98.8	80-120	1.43	20
Sulfate as SO4	9.9	0.5		"	10.0		98.8	80-120	0.324	20

Duplicate (AVF0155-DUP1)

Source: 1206150-02

Prepared & Analyzed: 06/14/12

Chloride	0.3	0.5		mg/L		0.3			0.303	20
Sulfate as SO4	1.7	0.5		"		2.1			19.3	20

Matrix Spike (AVF0155-MS1)

Source: 1206150-06

Prepared & Analyzed: 06/14/12

Chloride	11.1	0.5		mg/L	10.0	0.4	106	75-125		
Sulfate as SO4	11.5	0.5		"	10.0	0.9	106	75-125		

Matrix Spike Dup (AVF0155-MSD1)

Source: 1206150-06

Prepared & Analyzed: 06/14/12

Chloride	11.3	0.5		mg/L	10.0	0.4	109	75-125	2.17	20
Sulfate as SO4	11.7	0.5		"	10.0	0.9	108	75-125	1.49	20

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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Wet Chemistry - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0142 - SM 4500-H+ B

Duplicate (AVF0142-DUP1)		Source: 1206150-01		Prepared: 06/14/12 Analyzed: 06/15/12						Field
pH	3.66	0.100		pH Units		3.66			0.00	20

Duplicate (AVF0142-DUP2)		Source: 1206150-14		Prepared: 06/14/12 Analyzed: 06/15/12						Field
pH	5.98	0.100		pH Units		5.93			0.840	20

Batch AVF0144 - EPA 120.1

Duplicate (AVF0144-DUP1)		Source: 1206150-12		Prepared & Analyzed: 06/14/12						
Specific Conductance (EC)	101	5.00		uS/cm		101			0.00	20

Duplicate (AVF0144-DUP2)		Source: 1206150-21		Prepared & Analyzed: 06/14/12						
Specific Conductance (EC)	106	5.00		uS/cm		106			0.189	20

Batch AVF0196 - SM2320B

Blank (AVF0196-BLK1)				Prepared & Analyzed: 06/20/12						
Bicarbonate Alkalinity	ND	5.00		mg/L						
Carbonate Alkalinity	ND	5.00		"						
Hydroxide Alkalinity	ND	5.00		"						
Total Alkalinity	ND	5.00		"						

Blank (AVF0196-BLK2)				Prepared & Analyzed: 06/20/12						
Bicarbonate Alkalinity	ND	5.00		mg/L						
Carbonate Alkalinity	ND	5.00		"						
Hydroxide Alkalinity	ND	5.00		"						
Total Alkalinity	ND	5.00		"						

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RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Wet Chemistry - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0196 - SM2320B

LCS (AVF0196-BS1)

Prepared & Analyzed: 06/20/12

Bicarbonate Alkalinity	102	5.00		mg/L	100		102	80-120		
Total Alkalinity	102	5.00		"	100		102	80-120		

LCS (AVF0196-BS2)

Prepared & Analyzed: 06/20/12

Bicarbonate Alkalinity	104	5.00		mg/L	100		104	80-120		
Total Alkalinity	104	5.00		"	100		104	80-120		

LCS Dup (AVF0196-BSD1)

Prepared & Analyzed: 06/20/12

Bicarbonate Alkalinity	92.0	5.00		mg/L	100		92.0	80-120	10.3	20
Total Alkalinity	92.0	5.00		"	100		92.0	80-120	10.3	20

LCS Dup (AVF0196-BSD2)

Prepared & Analyzed: 06/20/12

Bicarbonate Alkalinity	103	5.00		mg/L	100		103	80-120	0.966	20
Total Alkalinity	103	5.00		"	100		103	80-120	0.966	20

Duplicate (AVF0196-DUP1)

Source: 1206150-20

Prepared & Analyzed: 06/20/12

Bicarbonate Alkalinity	80.0	5.00		mg/L		80.0			0.00	20
Carbonate Alkalinity	ND	5.00		"		ND			20	
Hydroxide Alkalinity	ND	5.00		"		ND			20	
Total Alkalinity	80.0	5.00		"		80.0			0.00	20

Duplicate (AVF0196-DUP2)

Source: 1206164-02

Prepared & Analyzed: 06/20/12

Bicarbonate Alkalinity	366	5.00		mg/L		364			0.548	20
Carbonate Alkalinity	ND	5.00		"		ND			20	
Hydroxide Alkalinity	ND	5.00		"		ND			20	
Total Alkalinity	366	5.00		"		364			0.548	20

Matrix Spike (AVF0196-MS1)

Source: 1206150-06

Prepared & Analyzed: 06/20/12

Total Alkalinity	166	5.00		mg/L	100		64.0	102	80-120	
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11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Wet Chemistry - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0196 - SM2320B

Matrix Spike (AVF0196-MS2)

Source: 1206170-01

Prepared & Analyzed: 06/20/12

Total Alkalinity	509	5.00		mg/L	100	420	89.0	80-120		
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Matrix Spike Dup (AVF0196-MSD1)

Source: 1206150-06

Prepared & Analyzed: 06/20/12

Total Alkalinity	162	5.00		mg/L	100	64.0	98.0	80-120	2.44	20
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Matrix Spike Dup (AVF0196-MSD2)

Source: 1206170-01

Prepared & Analyzed: 06/20/12

Total Alkalinity	501	5.00		mg/L	100	420	81.0	80-120	1.58	20
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Batch AVF0226 - SM2340B

Blank (AVF0226-BLK1)

Prepared & Analyzed: 06/21/12

Total Hardness	ND	5.00		mg/L						
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LCS (AVF0226-BS1)

Prepared & Analyzed: 06/21/12

Total Hardness	50.0	5.00		mg/L	50.0	100	80-120			
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LCS Dup (AVF0226-BSD1)

Prepared & Analyzed: 06/21/12

Total Hardness	50.0	5.00		mg/L	50.0	100	80-120	0.00	20	
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Duplicate (AVF0226-DUP1)

Source: 1206150-20

Prepared & Analyzed: 06/21/12

Total Hardness	72.0	5.00		mg/L		70.0		2.82	20	
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Matrix Spike (AVF0226-MS1)

Source: 1206189-03

Prepared & Analyzed: 06/21/12

Total Hardness	84.0	5.00		mg/L	50.0	40.0	88.0	75-125		
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Matrix Spike Dup (AVF0226-MSD1)

Source: 1206189-03

Prepared & Analyzed: 06/21/12

Total Hardness	80.0	5.00		mg/L	50.0	40.0	80.0	75-125	4.88	20
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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Wet Chemistry - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0241 - SM 2540C

Blank (AVF0241-BLK1) Prepared: 06/19/12 Analyzed: 06/24/12											
Total Dissolved Solids	ND	15.0		mg/L							
Blank (AVF0241-BLK2) Prepared: 06/19/12 Analyzed: 06/24/12											
Total Dissolved Solids	ND	15.0		mg/L							
Duplicate (AVF0241-DUP1) Source: 1206150-10 Prepared: 06/26/12 Analyzed: 06/28/12											
Total Dissolved Solids	25.0	15.0		mg/L		26.0			3.92	20	
Duplicate (AVF0241-DUP2) Source: 1206150-21 Prepared: 06/19/12 Analyzed: 06/24/12											
Total Dissolved Solids	55.0	15.0		mg/L		57.0			3.57	20	

Batch AVF0279 - SM2340B

Blank (AVF0279-BLK1) Prepared & Analyzed: 06/27/12											
Total Hardness	ND	5.00		mg/L							
LCS (AVF0279-BS1) Prepared & Analyzed: 06/27/12											
Total Hardness	46.0	5.00		mg/L	50.0		92.0	80-120			
LCS Dup (AVF0279-BSD1) Prepared & Analyzed: 06/27/12											
Total Hardness	50.0	5.00		mg/L	50.0		100	80-120	8.33	20	
Duplicate (AVF0279-DUP1) Source: 1206150-07 Prepared & Analyzed: 06/27/12											
Total Hardness	68.0	5.00		mg/L		70.0			2.90	20	
Matrix Spike (AVF0279-MS1) Source: 1206150-07 Prepared & Analyzed: 06/27/12											
Total Hardness	120	5.00		mg/L	50.0	70.0	100	75-125			

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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Wet Chemistry - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0279 - SM2340B

Matrix Spike Dup (AVF0279-MSD1)		Source: 1206150-07			Prepared & Analyzed: 06/27/12						
Total Hardness	120	5.00		mg/L	50.0	70.0	100	75-125	0.00	20	

Excelchem Environmental Lab.



Laboratory Representative

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Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Total Recoverable Metals - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0166 - EPA 6010B

Blank (AVF0166-BLK1)

Prepared: 06/18/12 Analyzed: 06/19/12

Aluminum	ND	50.0		ug/l							
Arsenic	ND	5.0		"							
Cadmium	ND	5.0		"							
Calcium	ND	100		"							
Copper	ND	5.0		"							
Iron	ND	20.0		"							
Magnesium	ND	50.0		"							
Potassium	ND	100		"							
Sodium	ND	200		"							
Zinc	ND	10.0		"							

LCS (AVF0166-BS1)

Prepared: 06/18/12 Analyzed: 06/19/12

Aluminum	923	50.0		ug/l	1000		92.3	80-120			
Arsenic	883	5.0		"	1000		88.3	80-120			
Cadmium	865	5.0		"	1000		86.5	80-120			
Calcium	852	100		"	1000		85.2	80-120			
Copper	869	5.0		"	1000		86.9	80-120			
Iron	882	20.0		"	1000		88.2	80-120			
Magnesium	872	50.0		"	1000		87.2	80-120			
Potassium	9290	100		"	10000		92.9	80-120			
Sodium	1040	200		"	1000		104	80-120			
Zinc	847	10.0		"	1000		84.7	80-120			

LCS Dup (AVF0166-BS1)

Prepared: 06/18/12 Analyzed: 06/19/12

Aluminum	978	50.0		ug/l	1000		97.8	80-120	5.82	25	
Arsenic	988	5.0		"	1000		98.8	80-120	11.3	25	
Cadmium	964	5.0		"	1000		96.4	80-120	10.8	25	
Calcium	950	100		"	1000		95.0	80-120	10.9	25	
Copper	969	5.0		"	1000		96.9	80-120	10.9	25	
Iron	973	20.0		"	1000		97.3	80-120	9.85	25	
Magnesium	974	50.0		"	1000		97.4	80-120	11.0	25	
Potassium	9410	100		"	10000		94.1	80-120	1.26	25	
Sodium	900	200		"	1000		90.0	80-120	14.0	25	
Zinc	945	10.0		"	1000		94.5	80-120	11.0	25	

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Total Recoverable Metals - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0166 - EPA 6010B

Matrix Spike (AVF0166-MS1)

Source: 1206150-10

Prepared: 06/18/12 Analyzed: 06/19/12

Aluminum	1000	50.0		ug/l	1000	27.9	97.7	75-125			
Arsenic	988	5.0		"	1000	ND	98.8	75-125			
Cadmium	963	5.0		"	1000	ND	96.3	75-125			
Calcium	9090	100		"	1000	8160	93.3	75-125			
Copper	955	5.0		"	1000	0.900	95.4	75-125			
Iron	1440	20.0		"	1000	483	95.2	75-125			
Magnesium	3820	50.0		"	1000	2860	95.3	75-125			
Potassium	10400	100		"	10000	742	96.6	75-125			
Sodium	8110	200		"	1000	7060	105	75-125			
Zinc	942	10.0		"	1000	2.10	94.0	75-125			

Matrix Spike Dup (AVF0166-MSD1)

Source: 1206150-10

Prepared: 06/18/12 Analyzed: 06/19/12

Aluminum	975	50.0		ug/l	1000	27.9	94.7	75-125	3.01	25	
Arsenic	987	5.0		"	1000	ND	98.7	75-125	0.0506	25	
Cadmium	964	5.0		"	1000	ND	96.4	75-125	0.104	25	
Calcium	9180	100		"	1000	8160	102	75-125	0.953	25	
Copper	960	5.0		"	1000	0.900	95.9	75-125	0.512	25	
Iron	1450	20.0		"	1000	483	96.7	75-125	1.04	25	
Magnesium	3860	50.0		"	1000	2860	99.4	75-125	1.07	25	
Potassium	10300	100		"	10000	742	95.8	75-125	0.772	25	
Sodium	8180	200		"	1000	7060	112	75-125	0.847	25	
Zinc	942	10.0		"	1000	2.10	94.0	75-125	0.00	25	

Batch AVF0175 - EPA 6010B

Blank (AVF0175-BLK1)

Prepared: 06/19/12 Analyzed: 06/20/12

Aluminum	ND	50.0		ug/l							
Arsenic	ND	5.0		"							
Cadmium	ND	5.0		"							
Calcium	ND	100		"							
Copper	ND	5.0		"							
Iron	ND	20.0		"							
Magnesium	ND	50.0		"							
Potassium	ND	100		"							
Sodium	ND	200		"							
Zinc	ND	10.0		"							

Excelchem Environmental Lab.

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Total Recoverable Metals - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0175 - EPA 6010B

LCS (AVF0175-BS1)

Prepared: 06/19/12 Analyzed: 06/20/12

Aluminum	951	50.0		ug/l	1000		95.1	80-120			
Arsenic	987	5.0		"	1000		98.7	80-120			
Cadmium	965	5.0		"	1000		96.5	80-120			
Calcium	988	100		"	1000		98.8	80-120			
Copper	978	5.0		"	1000		97.8	80-120			
Iron	978	20.0		"	1000		97.8	80-120			
Magnesium	975	50.0		"	1000		97.5	80-120			
Potassium	9670	100		"	10000		96.7	80-120			
Sodium	987	200		"	1000		98.7	80-120			
Zinc	961	10.0		"	1000		96.1	80-120			

LCS Dup (AVF0175-BSD1)

Prepared: 06/19/12 Analyzed: 06/20/12

Aluminum	917	50.0		ug/l	1000		91.7	80-120	3.66		25
Arsenic	988	5.0		"	1000		98.8	80-120	0.0810		25
Cadmium	968	5.0		"	1000		96.8	80-120	0.383		25
Calcium	1000	100		"	1000		100	80-120	1.57		25
Copper	996	5.0		"	1000		99.6	80-120	1.84		25
Iron	990	20.0		"	1000		99.0	80-120	1.17		25
Magnesium	989	50.0		"	1000		98.9	80-120	1.39		25
Potassium	9650	100		"	10000		96.5	80-120	0.197		25
Sodium	965	200		"	1000		96.5	80-120	2.27		25
Zinc	970	10.0		"	1000		97.0	80-120	0.933		25

Matrix Spike (AVF0175-MS1)

Source: 1206142-02

Prepared: 06/19/12 Analyzed: 06/20/12

Aluminum	955	50.0		ug/l	1000	58.8	89.6	75-125			
Arsenic	1020	5.0		"	1000	ND	102	75-125			
Cadmium	977	5.0		"	1000	ND	97.7	75-125			
Calcium	10900	100		"	1000	9660	121	75-125			
Copper	947	5.0		"	1000	2.80	94.4	75-125			
Iron	1040	20.0		"	1000	40.0	99.6	75-125			
Magnesium	2800	50.0		"	1000	1790	101	75-125			
Potassium	23300	100		"	10000	12500	108	75-125			
Zinc	1150	10.0		"	1000	148	100	75-125			

Excelchem Environmental Lab.

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Total Recoverable Metals - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0175 - EPA 6010B

Matrix Spike (AVF0175-MS2)

Source: 1206142-02RE1 Prepared: 06/19/12 Analyzed: 06/20/12

Arsenic	995	5.0		ug/l	1000	ND	99.5	75-125			
Sodium	246000	200		"	1000	238000	720	75-125			QL-01

Matrix Spike Dup (AVF0175-MSD1)

Source: 1206142-02 Prepared: 06/19/12 Analyzed: 06/20/12

Aluminum	945	50.0		ug/l	1000	58.8	88.6	75-125	1.12	25	
Arsenic	1010	5.0		"	1000	ND	101	75-125	0.0986	25	
Cadmium	972	5.0		"	1000	ND	97.2	75-125	0.482	25	
Calcium	10700	100		"	1000	9660	104	75-125	1.58	25	
Copper	944	5.0		"	1000	2.80	94.1	75-125	0.328	25	
Iron	1030	20.0		"	1000	40.0	98.8	75-125	0.775	25	
Magnesium	2760	50.0		"	1000	1790	97.5	75-125	1.19	25	
Potassium	23100	100		"	10000	12500	106	75-125	0.950	25	
Zinc	1140	10.0		"	1000	148	99.2	75-125	0.959	25	

Matrix Spike Dup (AVF0175-MSD2)

Source: 1206142-02RE1 Prepared: 06/19/12 Analyzed: 06/20/12

Arsenic	990	5.0		ug/l	1000	ND	99.0	75-125	0.453	25	
Sodium	240000	200		"	1000	238000	120	75-125	2.47	25	

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Laboratory Representative

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RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Dissolved Metals - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0173 - EPA 6010B

Blank (AVF0173-BLK1)

Prepared: 06/19/12 Analyzed: 06/22/12

Dissolved Aluminum	ND	50.0		ug/l							
Dissolved Arsenic	ND	5.0		"							
Dissolved Cadmium	ND	5.0		"							
Dissolved Copper	ND	5.0		"							
Dissolved Iron	ND	20.0		"							
Dissolved Zinc	ND	10.0		"							

LCS (AVF0173-BS1)

Prepared: 06/19/12 Analyzed: 06/21/12

Dissolved Aluminum	998	50.0		ug/l	1000		99.8	80-120			
Dissolved Arsenic	938	5.0		"	1000		93.8	80-120			
Dissolved Cadmium	984	5.0		"	1000		98.4	80-120			
Dissolved Copper	1030	5.0		"	1000		103	80-120			
Dissolved Iron	1010	20.0		"	1000		101	80-120			
Dissolved Zinc	983	10.0		"	1000		98.3	80-120			

LCS Dup (AVF0173-BSD1)

Prepared: 06/19/12 Analyzed: 06/21/12

Dissolved Aluminum	1050	50.0		ug/l	1000		105	80-120	5.12	25	
Dissolved Arsenic	938	5.0		"	1000		93.8	80-120	0.00	25	
Dissolved Cadmium	981	5.0		"	1000		98.1	80-120	0.305	25	
Dissolved Copper	1020	5.0		"	1000		102	80-120	0.293	25	
Dissolved Iron	1000	20.0		"	1000		100	80-120	1.09	25	
Dissolved Zinc	980	10.0		"	1000		98.0	80-120	0.377	25	

Matrix Spike (AVF0173-MS1)

Source: 1206150-13

Prepared: 06/19/12 Analyzed: 06/21/12

Dissolved Aluminum	1020	50.0		ug/l	1000	56.5	95.8	75-125			
Dissolved Arsenic	941	5.0		"	1000	ND	94.1	75-125			
Dissolved Cadmium	983	5.0		"	1000	ND	98.3	75-125			
Dissolved Copper	1020	5.0		"	1000	4.30	102	75-125			
Dissolved Iron	1020	20.0		"	1000	21.7	100	75-125			
Dissolved Zinc	1000	10.0		"	1000	21.9	98.0	75-125			

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Laboratory Representative

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RWQC Central Valley 11020 Sun Center Dr. #200 Rancho Cordova, CA 95670	Project: Walker Mine Project Number: [none] Project Manager: Jeff Huggins	Date Reported: 06/29/12 15:18
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Dissolved Metals - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0173 - EPA 6010B

Matrix Spike Dup (AVF0173-MSD1)	Source: 1206150-13			Prepared: 06/19/12 Analyzed: 06/21/12							
Dissolved Aluminum	1050	50.0		ug/l	1000	56.5	99.2	75-125	3.20	25	
Dissolved Arsenic	946	5.0		"	1000	ND	94.6	75-125	0.530	25	
Dissolved Cadmium	988	5.0		"	1000	ND	98.8	75-125	0.497	25	
Dissolved Copper	1040	5.0		"	1000	4.30	104	75-125	1.74	25	
Dissolved Iron	1040	20.0		"	1000	21.7	101	75-125	1.07	25	
Dissolved Zinc	1010	10.0		"	1000	21.9	99.1	75-125	1.09	25	

Batch AVF0178 - EPA 6010B

Blank (AVF0178-BLK1)	Prepared: 06/19/12 Analyzed: 06/20/12										
Dissolved Aluminum	ND	50.0		ug/l							
Dissolved Arsenic	ND	5.0		"							
Dissolved Cadmium	ND	5.0		"							
Dissolved Copper	ND	5.0		"							
Dissolved Iron	ND	20.0		"							
Dissolved Zinc	ND	10.0		"							

LCS (AVF0178-BS1)

LCS (AVF0178-BS1)	Prepared: 06/19/12 Analyzed: 06/20/12										
Dissolved Aluminum	972	50.0		ug/l	1000		97.2	80-120			
Dissolved Arsenic	968	5.0		"	1000		96.8	80-120			
Dissolved Cadmium	975	5.0		"	1000		97.5	80-120			
Dissolved Copper	988	5.0		"	1000		98.8	80-120			
Dissolved Iron	982	20.0		"	1000		98.2	80-120			
Dissolved Zinc	976	10.0		"	1000		97.6	80-120			

LCS Dup (AVF0178-BSD1)

LCS Dup (AVF0178-BSD1)	Prepared: 06/19/12 Analyzed: 06/20/12										
Dissolved Aluminum	962	50.0		ug/l	1000		96.2	80-120	1.03	25	
Dissolved Arsenic	963	5.0		"	1000		96.3	80-120	0.570	25	
Dissolved Cadmium	974	5.0		"	1000		97.4	80-120	0.103	25	
Dissolved Copper	992	5.0		"	1000		99.2	80-120	0.454	25	
Dissolved Iron	990	20.0		"	1000		99.0	80-120	0.903	25	
Dissolved Zinc	976	10.0		"	1000		97.6	80-120	0.0307	25	

Excelchem Environmental Lab.



Laboratory Representative

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Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Dissolved Metals - Quality Control

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AVF0178 - EPA 6010B

Matrix Spike (AVF0178-MS1)

Source: 1206150-21

Prepared: 06/19/12 Analyzed: 06/20/12

Dissolved Aluminum	946	50.0		ug/l	1000	26.9	91.9	75-125			
Dissolved Arsenic	964	5.0		"	1000	ND	96.4	75-125			
Dissolved Cadmium	968	5.0		"	1000	ND	96.8	75-125			
Dissolved Copper	972	5.0		"	1000	4.90	96.7	75-125			
Dissolved Iron	1100	20.0		"	1000	108	99.8	75-125			
Dissolved Zinc	972	10.0		"	1000	1.00	97.1	75-125			

Matrix Spike Dup (AVF0178-MSD1)

Source: 1206150-21

Prepared: 06/19/12 Analyzed: 06/20/12

Dissolved Aluminum	929	50.0		ug/l	1000	26.9	90.2	75-125	1.81	25	
Dissolved Arsenic	963	5.0		"	1000	ND	96.3	75-125	0.125	25	
Dissolved Cadmium	967	5.0		"	1000	ND	96.7	75-125	0.0723	25	
Dissolved Copper	978	5.0		"	1000	4.90	97.4	75-125	0.697	25	
Dissolved Iron	1100	20.0		"	1000	108	98.8	75-125	0.818	25	
Dissolved Zinc	972	10.0		"	1000	1.00	97.0	75-125	0.0412	25	

Excelchem Environmental Lab.

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Laboratory Representative

Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Notes and Definitions

QL-01 Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.

Field This analyte was analyzed outside of the EPA recommended hold time of ASAP and should be analyzed in the field.

ND Analyte not detected at reporting limit.

NR Not reported

Analysis Method

EPA 8260, EPA 8021/8015M

EPA 8270, EPA 8081, EPA 8082, EPA 8141, EPA 8015M (extractable)

Metals

TCLP

Not Specified

Prep Method

EPA 5030B

Water - EPA 3510C, Soil- EPA 3550B

Water- 3005A, Soil- 3050B

EPA 1311

Same as Analysis Method

Excelchem Environmental Lab.



Laboratory Representative

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Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

CHAIN OF CUSTODY		REPORTING REQUIREMENTS BELOW:
Excelchem Environmental Labs 1135 W. Sunset Blvd. Suite A Rocklin, CA 95765 Ph: 916-543-4445 Fx: 916-543-4449		PDF / Standard Format Geotracker / EDF / Provide Global ID
Project Manager: <u>Jeff Huggins</u> Email Address for Reporting: <u>jhuggins@waterboards.ca.gov</u> P.Off / Project Name: <u>Walker Mine</u> Project Location: <u>Plymouth County</u> Billing Address: <u>SAME</u> Company Address: <u>RWQC B - Central Valley Water Board</u> <u>11020 Sun Center Drive, #200</u> <u>Rancho Cordova, CA 95670</u>		EDD / Equis / Data Table MIDL Format Data to be reported to States Database? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> EDT / CDPH - Provide Source Codes / PWS ID:
Phone #: <u>916 484-4631</u> Call #: <u>916 484-4631</u> Fax #: <u>916 484-4631</u> Sampler Name: <u>Jeff Huggins</u> Sampler Signature: <u>[Signature]</u>		EDT / CDPH - Provide Source Codes / PWS ID:
Matrix Table: S = Soil / Sludge / Solid (circle one) A = Air DW = Drinking Water MW = Monitoring Wells GW = Groundwater TW = Treated Water WW = Waste Water		ANALYSIS REQUEST Metals Stic Total Total Metals Dissolved Metals General Minerals
Matrix (See Matrix Table) Preserved? (Mark yes and no if both available) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Tedium / Summa # 1 Liter Amber 500ml Amber 250ml Amber 40ml Voa - Amber 40ml Voa - Clear 1 Gallon plastic 1000ml plastic 500ml plastic 250ml plastic Colliform Tube	LAB USE: Bin #: SA Date: 6/11/12 Microbiology NA Work Order: 1226150
	Matrix Table: Source Codes DATE TIME WM-30 6:12 10:45 WM-7a 2:30 WM-6 2:45 WM-7b 2:54 WM-7c 2:57 WM-1 3:25 WM-2 3:30 WM-19 3:40 WM-3 3:45 WM-5 4:00	Matrix Table: Matrix (See Matrix Table) Preserved? (Mark yes and no if both available) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Relinquished by: <u>[Signature]</u>	DATE TIME RECEIVED BY: 6-14-12 8:55 <u>[Signature]</u>	Remarks: Total Metals Dissolved Metals General Minerals
Relinquished by: <u>[Signature]</u>	DATE TIME RECEIVED BY: 6-14-12 8:41 <u>[Signature]</u>	Matrix Table: Matrix (See Matrix Table) Preserved? (Mark yes and no if both available) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Excelchem Environmental Lab.

[Signature]

Laboratory Representative

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Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

CHAIN OF CUSTODY		REPORTING REQUIREMENTS BELOW:																							
Excelchem Environmental Labs 1135 W. Sunset Blvd., Suite A Rocklin, CA 95765 Ph: 916-543-4445 Fax: 916-543-4449		PDF / Standard Format Geotracker / EDF / Provide Global ID EDD / Equis / Data Table MDL Format Data to be reported to States Database? Yes <input type="checkbox"/> No <input type="checkbox"/> EDT / CDPH - Provide Source Codes / PWS ID:																							
Project Manager: Jeff Huggins Email Address for Reporting: jhuggins@waterboards.ca.gov Email Address for Reporting: Same Company Address: RWQCB-Central Valley Water Board 11020 Sun Center Drive Rancho Cordova, CA 95670 Billing Address: Same		Cell #: 916 464-4639 Fax #: _____ P.O.# / Project Name: Walker Mine Project Location: Plumas County Sampler Name: Jeff Huggins Sampler Signature: <i>Jeff Huggins</i>																							
Matrix Table: S = Soil / Sludge / Solid (circle one) A = Air DW = Drinking Water MW = Monitoring Wells GW = Groundwater TW = Treated Water WW = Waste Water		ANALYSIS REQUEST Metals Silt Total Total Metals Dissolved Metals H/A/S/C/L/Cu/Pb/Zn General Minerals																							
SAMPLE ID:	SOURCE	SAMPLING DATE TIME	Matrix (See Matrix Table)	Preserved? (Mark yes and no if both available)	Yes	No	Tedar / Summa	Coffform Tube	500ml plastic	250ml plastic	1000ml plastic	1 Gallon plastic	1 Liter Amber	40ml Voa - Clear	40ml Voa - Amber	250ml Amber	500ml Amber	1 Liter Amber	Metals	Silt Total	Total Metals	Dissolved Metals	H/A/S/C/L/Cu/Pb/Zn	General Minerals	LAB USE
WM-4		6/13/12 8:50		<input checked="" type="checkbox"/>																					Bin #: 59 Due: 6/21/12 Microbiology: NA Work Order: 120619
WM-9		9:00																							11
WM-11		9:15																							12
WM-12		9:20																							13
WM-13		9:25																							14
WM-17		9:35																							15
WM-14		11:30																							16
WM-15		11:35																							17
WM-16		11:45																							18
WM-18		12:00																							19
WM-20																									20
																									21
Relinquished by: <i>Jeff Huggins</i> Relinquished by: _____		DATE: 6/14/12 TIME: 8:35	Received by: _____ Received by Laboratory: _____	DATE: 6/14/12 TIME: 8:41	Remarks:																				

Excelchem Environmental Lab.



Laboratory Representative

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Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

*Monica - please attach to
COC when
it comes in*

Page 1 of 1

Front Desk

From: Jeff Huggins [jhuggins@waterboards.ca.gov]
Sent: Tuesday, June 05, 2012 1:27 PM
To: Front Desk
Cc: Leticia Valadez

Subject: Request for Sample Bottles and Analytical Services - Walker Mine Project

We are planning on doing some water sampling (no soils) next week at an old abandoned copper mine (Walker Mine) in Plumas County. In October of last year Excelchem provided bottles and analytical services for this same site. Excelchem's Work Order number for the 23 November 2011 analytical report is: 1111071.

We would like Excelchem to analyze and report for the same constituents as last year. Those were:

1. Total Metals - Aluminum, Arsenic, Copper, Iron, Zinc, and Cadmium. All with HNO3 (or equal) preservative.
2. Dissolved Metals - Aluminum, Arsenic, Copper, Iron, Zinc, and Cadmium.
3. General Minerals - Total Alkalinity, Bicarbonate as CaCO3, Carbonate as CaCO3, Hydroxide as CaCO3, Chloride, Specific Conductance (EC), Calcium, Magnesium, Potassium, Sodium, Hardness as CaCO3, pH, Sulfate as SO4 and Total Dissolved Solids.

Items 1 and 2 above should be analyzed on an individual basis (not as a Bid Group) to reduce costs. Item 3 should be run as Bid Group 20 (Title 22 General Minerals) in accordance with the Regional Water Boards contract if that is most effective cost-wise.

Reporting limits for metals should be sufficiently low to meet the following criteria:

- Al 50 ug/L
- As 5 ug/L
- Cd 5 ug/L
- Cu 5 ug/L
- Fe 150 ug/L
- Zn 20 ug/L

For this sampling event we have 25 sample locations. I believe that we used 1L ml plastic bottles for the total, dissolved, and general minerals analysis and that Excelchem preserved the samples upon receipt at the lab the day following sample collection. If this protocol has changed, please contact me and let me know what to expect.

We need the sample bottles delivered to our Rancho Cordova office no later than 12:00pm on Monday June 11th and we will drop off the sample bottles at your Roseville facility on the morning of Thursday June 14th.

Please contact me should you have any questions.

Regards,

Jeff S Huggins
Water Resources Control Engineer
Title 27 Permitting and Mining
Regional Water Quality Control Board
11020 Sun Center Drive, # 200
Rancho Cordova, CA 95670
Phone (916)464-4639
Fax (916)464-4782

6/5/2012

Excelchem Environmental Lab.



Laboratory Representative

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Excelchem Environmental Labs

RWQC Central Valley
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

Project: Walker Mine
Project Number: [none]
Project Manager: Jeff Huggins

Date Reported:
06/29/12 15:18

Sample Integrity

WORK ORDER 1206150

Date Received: 6-14-12

Section 1 – Sample Arrival Info.

Sample Transport: ONTRAC UPS USPS Walk-In EXCELCHEM Courier Fed-Ex Other: _____

Transported In: Ice Chest Box Hand

Describe type of packing materials: Bubble Wrap Foam Packing Peanuts Paper Other: N/A

Has chilling process begun? Y N Samples Received: Chilled to Touch / Ambient On Ice

Temperature of Samples (°C): 3 Ice Chest Temperature(s) (°C): 2

Section 2 – Bottle/Analysis Info.

	Yes	No	N/A	Comments
Did all bottles arrive unbroken and intact?	<input checked="" type="checkbox"/>			
Did all bottle labels agree with COC?	<input checked="" type="checkbox"/>			no sample date/time on COC for WM-20
Were correct containers used for the tests requested?	<input checked="" type="checkbox"/>			*General minerals wanted not listed
Were correct preservations used for the tests requested?	<input checked="" type="checkbox"/>			
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>			
Were bubbles present in VOA Vials?: (Volatile Methods Only)			<input checked="" type="checkbox"/>	

used info. from Bottle

Section 3 – Summa/Flow regulator Info.

Used Summa#: _____
Unused Summa#: _____
Cleaning Summa#: _____
Regulator#: N/A
Was there any visual damage to summa canisters or flow regulators? **Explain.**

WM-20 taken from bottle 6/13/12 at 100

Section 4 – COC Info.

	Completed		Info From Container		Completed		Comments
	Yes	No			Yes	No	
Was COC Received	<input checked="" type="checkbox"/>			Analysis Requested	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Date Sampled	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Samples arrived within holding time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time Sampled	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Any hold times less than 72 hrs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(pH)
Sample ID	<input checked="" type="checkbox"/>			Client Name	<input checked="" type="checkbox"/>		
Rush TAT		<input checked="" type="checkbox"/>		Address/Telephone #	<input checked="" type="checkbox"/>		

Last sample is not checked (WM-20)

Section 5 – Comments / Discrepancies

Was Client notified of discrepancies: Yes No N/A Notified by: _____
Explanations / Comments: _____

Samples Labeled by: smg
Bin #: 39
COC Scanned/Attached by: smg
Sample labels reviewed by: _____

Filled _____ Date: 6-14-12
Out by: CH Time: 853

Excelchem Environmental Lab.

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Laboratory Representative