

Phelps Dodge Sierrita
 OJ03Z5

ACZ Project ID: L63094
 Date Received: 6/7/2007
 Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L63094-01	UGW-627483-060607									X		<input type="checkbox"/>
L63094-02	FGW-627483-060607		Y									<input type="checkbox"/>

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

L63094

CHAIN of CUSTODY

Report to:

Name: Kim Garcia
 Company: Hydro Gen Chem Inc.
 E-mail: kimg@hginc.com

Address: 51 W. Wetmore Rd
Tucson, AZ 85705
 Telephone: 520) 293-1500 x123

Copy of Report to:

Name: Ned Hall, Bill Dorris, Jim Morris
 Company: PDSE/HGC

E-mail: Jim@hginc.com billdorris@fmi.com
 Telephone: 293-1500 x123 648-9873

Invoice to:

Name: Ned Hall
 Company: PDSE
 E-mail: ned-hall@fmi.com

Address: 6200 W. Duval Mine Rd
PO Box 527 Green Valley, AZ 85602
 Telephone: 520) 648-8857

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES
 NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #: Siering short
 Project/PO #: OJ0325
 Reporting state for compliance testing: AZ
 Sampler's Name: Mark Alneson
 Are any samples NRC licensable material? No

Matrix	# of Containers	SO ₄ ⁻	Ca Mg Na K	Al, TDS SO ₄ ⁻	Cl ⁻ F ⁻ NO ₃ ⁻ NO ₂ ⁻	PH	EC	Temp
UGW-627483-060607	1	X				7.74	449	25.3
FGW-627483-060607	2		X	X		7.74	449	25.3

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please Rush Results
 UGW = Unfiltered Groundwater Sample
 FGW = Filtered Groundwater Sample

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE-TIME	RECEIVED BY:	DATE-TIME
<u>Mark Alneson</u>	<u>6/6/07: 1558</u>	<u>KL</u>	<u>6/7/07 12:17</u>

PDSI SECOND QUARTER 2007 LAB DATA

April 26, 2007

Report to:
Bill Dorris
Phelps Dodge Sierrita
P.O. Box 527
Green Valley, AZ 85622-0527

Bill to:
Accounts Payable
Phelps Dodge Sierrita
P.O. Box 2671
Phoenix, AZ 85002-2671

cc: Jim Norris

Project ID: OJ03DL
ACZ Project ID: L62062

Bill Dorris:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 18, 2007. This project has been assigned to ACZ's project number, L62062. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L62062. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after May 26, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

26/Apr/07

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.



Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: I-10

ACZ Sample ID: **L62062-01**
 Date Sampled: 04/16/07 11:52
 Date Received: 04/18/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	188			mg/L	0.2	1	04/20/07 22:42	djt
Magnesium, dissolved	M200.7 ICP	30.6			mg/L	0.2	1	04/20/07 22:42	djt
Potassium, dissolved	M200.7 ICP	6.3			mg/L	0.3	2	04/20/07 22:42	djt
Sodium, dissolved	M200.7 ICP	54.8			mg/L	0.3	2	04/20/07 22:42	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		104			mg/L	2	20	04/24/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/24/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/24/07 0:00	cas
Total Alkalinity		104			mg/L	2	20	04/24/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		0.0			%			04/26/07 9:58	calc
Sum of Anions		14.5			meq/L	0.1	0.5	04/26/07 9:58	calc
Sum of Cations		14.5			meq/L	0.1	0.5	04/26/07 9:58	calc
Chloride	M300.0 - Ion Chromatography	41			mg/L	5	30	04/24/07 23:55	nps
Fluoride	M300.0 - Ion Chromatography		U		mg/L	1	5	04/24/07 23:55	nps
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	1.43			mg/L	0.02	0.1	04/26/07 9:58	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1.43	H	*	mg/L	0.02	0.1	04/18/07 20:59	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		HU	*	mg/L	0.01	0.05	04/18/07 20:59	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	1000		*	mg/L	10	20	04/19/07 11:36	lcp
Sulfate	300.0 - Ion Chromatography	533			mg/L	5	30	04/24/07 23:55	nps
TDS (calculated)	Calculation	922			mg/L	10	50	04/26/07 9:58	calc
TDS (ratio - measured/calculated)	Calculation	1.08						04/26/07 9:58	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
Sample ID: M-8

ACZ Sample ID: **L62062-02**
Date Sampled: 04/16/07 09:50
Date Received: 04/18/07
Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	41.7			mg/L	0.2	1	04/20/07 22:47	djt
Magnesium, dissolved	M200.7 ICP	8.7			mg/L	0.2	1	04/20/07 22:47	djt
Potassium, dissolved	M200.7 ICP	3.7			mg/L	0.3	2	04/20/07 22:47	djt
Sodium, dissolved	M200.7 ICP	29.6			mg/L	0.3	2	04/20/07 22:47	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		161			mg/L	2	20	04/24/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/24/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/24/07 0:00	cas
Total Alkalinity		161			mg/L	2	20	04/24/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		7.7			%			04/26/07 9:58	calc
Sum of Anions		3.6			meq/L	0.1	0.5	04/26/07 9:58	calc
Sum of Cations		4.2			meq/L	0.1	0.5	04/26/07 9:58	calc
Chloride	M300.0 - Ion Chromatography	12.0			mg/L	0.5	3	04/25/07 0:13	nps
Fluoride	M300.0 - Ion Chromatography	0.4	B		mg/L	0.1	0.5	04/25/07 0:13	nps
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.70			mg/L	0.02	0.1	04/26/07 9:58	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.70	H	*	mg/L	0.02	0.1	04/18/07 21:02	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		HU	*	mg/L	0.01	0.05	04/18/07 21:02	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	260		*	mg/L	10	20	04/19/07 11:38	lcp
Sulfate	300.0 - Ion Chromatography		U		mg/L	0.5	3	04/25/07 0:13	nps
TDS (calculated)	Calculation	196			mg/L	10	50	04/26/07 9:58	calc
TDS (ratio - measured/calculated)	Calculation	1.33						04/26/07 9:58	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
Sample ID: M-10

ACZ Sample ID: **L62062-03**
Date Sampled: 04/16/07 12:32
Date Received: 04/18/07
Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	35.8			mg/L	0.2	1	04/20/07 23:00	djt
Magnesium, dissolved	M200.7 ICP	7.5			mg/L	0.2	1	04/20/07 23:00	djt
Potassium, dissolved	M200.7 ICP	4.6			mg/L	0.3	2	04/20/07 23:00	djt
Sodium, dissolved	M200.7 ICP	50.4			mg/L	0.3	2	04/20/07 23:00	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		133			mg/L	2	20	04/24/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/24/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/24/07 0:00	cas
Total Alkalinity		133			mg/L	2	20	04/24/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		1.1			%			04/26/07 9:58	calc
Sum of Anions		4.6			meq/L	0.1	0.5	04/26/07 9:58	calc
Sum of Cations		4.7			meq/L	0.1	0.5	04/26/07 9:58	calc
Chloride	M300.0 - Ion Chromatography	13.9			mg/L	0.5	3	04/25/07 0:31	nps
Fluoride	M300.0 - Ion Chromatography	0.8			mg/L	0.1	0.5	04/25/07 0:31	nps
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.63			mg/L	0.02	0.1	04/26/07 9:58	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.63	H	*	mg/L	0.02	0.1	04/18/07 21:03	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		HU	*	mg/L	0.01	0.05	04/18/07 21:03	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	310		*	mg/L	10	20	04/19/07 11:39	lcp
Sulfate	300.0 - Ion Chromatography	72.6			mg/L	0.5	3	04/25/07 0:31	nps
TDS (calculated)	Calculation	268			mg/L	10	50	04/26/07 9:58	calc
TDS (ratio - measured/calculated)	Calculation	1.16						04/26/07 9:58	calc

Arizona license number: AZ0102



Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of Interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of Interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
U	Analyte was analyzed for but not detected at the indicated MDL

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for inorganic analyses are reported on an "as received" basis.

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62062

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223572													
WG223572LCSW2	LCSW	04/24/07 12:20	WC070421-1	820		802.3	mg/L	97.8	80	120			
L62067-02DUP	DUP	04/24/07 13:57			26	26.3	mg/L				1.1	20	
WG223572LCSW5	LCSW	04/24/07 15:27	WC070421-1	820		808	mg/L	98.5	80	120			
WG223572LCSW8	LCSW	04/24/07 18:47	WC070421-1	820		807.2	mg/L	98.4	80	120			

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223372													
WG223372ICV	ICV	04/20/07 21:21	II070403-5	100		99.15	mg/L	99.2	95	105			
WG223372ICB	ICB	04/20/07 21:25				U	mg/L		-0.6	0.6			
WG223372LFB	LFB	04/20/07 21:42	II070418-2	67.97554		73.79	mg/L	108.6	85	115			
L61927-03AS	AS	04/20/07 21:59	II070418-2	67.97554	138	202.77	mg/L	95.3	85	115			
L61927-03ASD	ASD	04/20/07 22:04	II070418-2	67.97554	138	200.54	mg/L	92	85	115	1.11	20	
L62062-02AS	AS	04/20/07 22:51	II070418-2	67.97554	41.7	113.87	mg/L	106.2	85	115			
L62062-02ASD	ASD	04/20/07 22:55	II070418-2	67.97554	41.7	111.05	mg/L	102	85	115	2.51	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223535													
WG223535ICV1	ICV	04/24/07 13:03	IC070405-1	20		20.16	mg/L	100.8	90	110			
WG223535ICB	ICB	04/24/07 13:21				U	mg/L		-1.5	1.5			
WG223535LFB	LFB	04/24/07 13:40	IC070205-3	30		30.02	mg/L	100.1	90	110			
L62005-04DUP	DUP	04/24/07 19:42			16600	16820	mg/L				1.3	20	
L62005-05AS	AS	04/24/07 21:30	IC070205-3	150	86	237.3	mg/L	100.9	90	110			

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223535													
WG223535ICV1	ICV	04/24/07 13:03	IC070405-1	3.984		4.17	mg/L	104.7	90	110			
WG223535ICB	ICB	04/24/07 13:21				U	mg/L		-0.3	0.3			
WG223535LFB	LFB	04/24/07 13:40	IC070205-3	1.5		1.53	mg/L	102	90	110			
L62005-04DUP	DUP	04/24/07 19:42			5700	5770	mg/L				1.2	20	
L62005-05AS	AS	04/24/07 20:54	IC070205-3	1.5	3.2	4.56	mg/L	90.7	90	110			

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223372													
WG223372ICV	ICV	04/20/07 21:21	II070403-5	100		97.13	mg/L	97.1	95	105			
WG223372ICB	ICB	04/20/07 21:25				U	mg/L		-0.6	0.6			
WG223372LFB	LFB	04/20/07 21:42	II070418-2	54.9596		58.7	mg/L	106.8	85	115			
L61927-03AS	AS	04/20/07 21:59	II070418-2	54.9596	35.3	92.09	mg/L	103.3	85	115			
L61927-03ASD	ASD	04/20/07 22:04	II070418-2	54.9596	35.3	90.66	mg/L	100.7	85	115	1.56	20	
L62062-02AS	AS	04/20/07 22:51	II070418-2	54.9596	8.7	67.04	mg/L	106.2	85	115			
L62062-02ASD	ASD	04/20/07 22:55	II070418-2	54.9596	8.7	64.72	mg/L	101.9	85	115	3.52	20	

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62062

Nitrate/Nitrite as N, dissolved M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223304													
WG223304ICV	ICV	04/18/07 18:12	WI070308-3	2.416		2.393	mg/L	99	90	110			
WG223304ICB	ICB	04/18/07 18:13				U	mg/L		-0.06	0.06			
WG223307													
WG223307ICV	ICV	04/18/07 20:35	WI070308-3	2.416		2.271	mg/L	94	90	110			
WG223307ICB	ICB	04/18/07 20:36				U	mg/L		-0.06	0.06			
WG223307LFB1	LFB	04/18/07 20:37	WI070307-9	2		1.925	mg/L	96.3	90	110			
L62057-11AS	AS	04/18/07 20:58	WI070307-9	2	U	1.905	mg/L	95.3	90	110			
L62062-01DUP	DUP	04/18/07 21:00			1.43	1.443	mg/L				0.9	20	
WG223307LFB2	LFB	04/18/07 21:15	WI070307-9	2		1.916	mg/L	95.8	90	110			

Nitrite as N, dissolved M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223304													
WG223304ICV	ICV	04/18/07 18:12	WI070308-3	.609		.647	mg/L	106.2	90	110			
WG223304ICB	ICB	04/18/07 18:13				U	mg/L		-0.03	0.03			
WG223307													
WG223307ICV	ICV	04/18/07 20:35	WI070308-3	.609		.621	mg/L	102	90	110			
WG223307ICB	ICB	04/18/07 20:36				U	mg/L		-0.03	0.03			
WG223307LFB1	LFB	04/18/07 20:37	WI070307-9	1		1.05	mg/L	105	90	110			
L62057-11AS	AS	04/18/07 20:58	WI070307-9	1	U	1.047	mg/L	104.7	90	110			
L62062-01DUP	DUP	04/18/07 21:00				U	mg/L				0	20	RA
WG223307LFB2	LFB	04/18/07 21:15	WI070307-9	1		1.006	mg/L	100.6	90	110			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223372													
WG223372ICV	ICV	04/20/07 21:21	II070403-5	20		20.15	mg/L	100.8	95	105			
WG223372ICB	ICB	04/20/07 21:25				U	mg/L		-0.9	0.9			
WG223372LFB	LFB	04/20/07 21:42	II070418-2	99.61502		108.96	mg/L	109.4	85	115			
L61927-03AS	AS	04/20/07 21:59	II070418-2	99.61502	3.3	115.79	mg/L	112.9	85	115			
L61927-03ASD	ASD	04/20/07 22:04	II070418-2	99.61502	3.3	113.15	mg/L	110.3	85	115	2.31	20	
L62062-02AS	AS	04/20/07 22:51	II070418-2	99.61502	3.7	114.27	mg/L	111	85	115			
L62062-02ASD	ASD	04/20/07 22:55	II070418-2	99.61502	3.7	109.26	mg/L	106	85	115	4.48	20	

Residue, Filterable (TDS) @180C M160.1 - Gravimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223333													
WG223333PBW	PBW	04/19/07 11:20				U	mg/L		-20	20			
WG223333LCSW	LCSW	04/19/07 11:21	PCN26761	260		290	mg/L	111.5	80	120			
L62067-05DUP	DUP	04/19/07 11:49			60	60	mg/L				0	20	RA

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: L62062

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223372													
WG223372ICV	ICV	04/20/07 21:21	11070403-5	100		99.58	mg/L	99.6	95	105			
WG223372ICB	ICB	04/20/07 21:25				U	mg/L		-0.9	0.9			
WG223372LFB	LFB	04/20/07 21:42	11070418-2	99.92361		107.75	mg/L	107.8	85	115			
L61927-03AS	AS	04/20/07 21:59	11070418-2	99.92361	88.9	189.89	mg/L	101.1	85	115			
L61927-03ASD	ASD	04/20/07 22:04	11070418-2	99.92361	88.9	187.41	mg/L	98.6	85	115	1.31	20	
L62062-02AS	AS	04/20/07 22:51	11070418-2	99.92361	29.6	135.7	mg/L	106.2	85	115			
L62062-02ASD	ASD	04/20/07 22:55	11070418-2	99.92361	29.6	130.79	mg/L	101.3	85	115	3.68	20	

Sulfate 300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223535													
WG223535ICV1	ICV	04/24/07 13:03	11070405-1	50.15		52.3	mg/L	104.3	90	110			
WG223535ICB	ICB	04/24/07 13:21				U	mg/L		-1.5	1.5			
WG223535LFB	LFB	04/24/07 13:40	11070205-3	30		31.18	mg/L	103.9	90	110			
L62005-04DUP	DUP	04/24/07 19:05			3540	3546	mg/L				0.2	20	
L62005-05AS	AS	04/24/07 21:30	11070205-3	150	205	356.2	mg/L	100.8	90	110			

helps Dodge Sierrita

ACZ Project ID: **L62062**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62062-01	WG223307	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
	WG223333	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L62062-02	WG223307	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
	WG223333	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L62062-03	WG223307	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
	WG223333	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Phelps Dodge Sierrita

ACZ Project ID: **L62062**

No certification qualifiers associated with this analysis

helps Dodge Sierrita
OJ03DL

ACZ Project ID: L62062
Date Received: 4/18/2007
Received By:
Date Printed: 4/18/2007

Receipt Verification

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

	YES	NO	NA
			X
X			
			X
X			
X			
X			
		X	
X			
			X
		X	
			X
			X

Exceptions: If you answered no to any of the above questions, please describe

Some parameters were received past hold times.

Contact (For any discrepancies, the client must be contacted)

The client was not contacted.

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
1592	5.6	15

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

Phelps Dodge Sierrita
OJ03DL

ACZ Project ID: L62062
Date Received: 4/18/2007
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L62062-01	J-10		Y		Y							<input type="checkbox"/>
L62062-02	M-8		Y		Y							<input type="checkbox"/>
L62062-03	M-10		Y		Y							<input type="checkbox"/>

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L42U02

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: *Billy Dorris*
 Company: *Phelps Dodge Sierrita*
 E-mail: *Billy-Dorris@FMI.com*

Address: *6200 W. Duval Mine Rd*
Green Valley Az 85614
 Telephone: *520 648 8873*

Copy of Report to:

Name: *Jim Norris*
 Company: *Hydro Geo Chem*

E-mail: *jimn@hginc.com*
 Telephone: *520-293-1500 Ext 112*

Invoice to:

Name:
 Company:
 E-mail:

Address:
 Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES
 NO
 If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #:
 Project/PO #: *OJ03DL*
 Reporting state for compliance testing:
 Sampler's Name:
 Are any samples NRC licensable material?

# of Containers									

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers						
<i>I-10</i>	<i>4-16-07 / 11:52</i>	<i>GW</i>	<i>6</i>	<i>} Sierrita Short</i>					
<i>M-8</i>	<i>4-16-07 / 9:50</i>	<i>GW</i>	<i>6</i>						
<i>M-10</i>	<i>4-16-07 / 12:32</i>	<i>GW</i>	<i>6</i>						

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
<i>Billy F. Dorris</i>	<i>4-17-07 / 14:45</i>	<i>CEB</i>	<i>4-18-07 10:45</i>

Bill Dorris
Phelps Dodge Sierrita
P.O. Box 527
6200 West Duval Mine Road
Green Valley, AZ 85622-0527

April 26, 2007

Cc: Jim Norris

Project ID: OJ03DL
ACZ Project ID: L61943

Bill Dorris:

Enclosed are revised analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 11, 2007 and reported on April 26, 2007. Refer to the case narrative for an explanation of the changes. This project was assigned to ACZ's project number, L61943. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L61943. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

This report should be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.

26/Apr/07

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.



Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: PZ-7

ACZ Sample ID: **L61943-01**
 Date Sampled: 04/09/07 09:24
 Date Received: 04/11/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	145			mg/L	0.2	1	04/17/07 1:45	djt
Magnesium, dissolved	M200.7 ICP	40.4			mg/L	0.2	1	04/18/07 18:54	msh
Potassium, dissolved	M200.7 ICP	3.7			mg/L	0.3	2	04/17/07 1:45	djt
Sodium, dissolved	M200.7 ICP	30.2			mg/L	0.3	2	04/17/07 1:45	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		103			mg/L	2	20	04/13/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Total Alkalinity		103			mg/L	2	20	04/13/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		1.7			%			04/26/07 0:00	calc
Sum of Anions		11.6			meq/L	0.1	0.5	04/26/07 0:00	calc
Sum of Cations		12.0			meq/L	0.1	0.5	04/26/07 0:00	calc
Chloride	M325.2 - Colorimetric	72			mg/L	1	5	04/18/07 11:24	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/16/07 15:00	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.06			mg/L	0.02	0.1	04/20/07 18:12	nps
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	800			mg/L	10	20	04/12/07 13:38	seb
Sulfate	SM4500 SO4-D	360			mg/L	10	50	04/12/07 14:27	lcp
TDS (calculated)	Calculation	713			mg/L	10	50	04/26/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.12						04/26/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: MH-30

ACZ Sample ID: **L61943-02**

Date Sampled: 04/09/07 10:16

Date Received: 04/11/07

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	443			mg/L	0.4	2	04/17/07 1:49	djt
Magnesium, dissolved	M200.7 ICP	122			mg/L	0.4	2	04/18/07 18:58	msh
Potassium, dissolved	M200.7 ICP	10.9			mg/L	0.6	3	04/17/07 1:49	djt
Sodium, dissolved	M200.7 ICP	219			mg/L	0.6	3	04/17/07 1:49	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		117			mg/L	2	20	04/13/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Total Alkalinity		117			mg/L	2	20	04/13/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-1.9			%			04/26/07 0:00	calc
Sum of Anions		43.7			meq/L	0.1	0.5	04/26/07 0:00	calc
Sum of Cations		42.1			meq/L	0.1	0.5	04/26/07 0:00	calc
Chloride	M325.2 - Colorimetric	120			mg/L	10	50	04/18/07 11:33	jag
Fluoride	SM4500F-C	0.3	B	*	mg/L	0.1	0.5	04/16/07 15:07	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.53			mg/L	0.02	0.1	04/20/07 18:15	nps
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	3030			mg/L	10	20	04/12/07 13:40	seb
Sulfate	SM4500 SO4-D	1810			mg/L	10	50	04/12/07 14:31	lcp
TDS (calculated)	Calculation	2800			mg/L	10	50	04/26/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.08						04/26/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-11

ACZ Sample ID: **L61943-03**
 Date Sampled: 04/09/07 13:45
 Date Received: 04/11/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	499			mg/L	0.4	2	04/17/07 1:53	djt
Magnesium, dissolved	M200.7 ICP	97.2			mg/L	0.4	2	04/18/07 19:02	msh
Potassium, dissolved	M200.7 ICP	8.5			mg/L	0.6	3	04/17/07 1:53	djt
Sodium, dissolved	M200.7 ICP	196			mg/L	0.6	3	04/17/07 1:53	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		124			mg/L	2	20	04/13/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Total Alkalinity		124			mg/L	2	20	04/13/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-1.5			%			04/26/07 0:00	calc
Sum of Anions		43.1			meq/L	0.1	0.5	04/26/07 0:00	calc
Sum of Cations		41.8			meq/L	0.1	0.5	04/26/07 0:00	calc
Chloride	M325.2 - Colorimetric	130			mg/L	10	50	04/18/07 11:34	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/16/07 15:14	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.88			mg/L	0.02	0.1	04/20/07 18:16	nps
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2910			mg/L	10	20	04/12/07 13:41	seb
Sulfate	SM4500 SO4-D	1760			mg/L	10	50	04/12/07 14:35	lcp
TDS (calculated)	Calculation	2770			mg/L	10	50	04/26/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.05						04/26/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: IW-19

ACZ Sample ID: **L61943-04**

Date Sampled: 04/09/07 10:40

Date Received: 04/11/07

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XG	Units	MDL	PCL	Date	Analyst
Calcium, dissolved	M200.7 ICP	486			mg/L	0.4	2	04/17/07 1:57	djt
Magnesium, dissolved	M200.7 ICP	123			mg/L	0.4	2	04/18/07 19:07	msh
Potassium, dissolved	M200.7 ICP	7.3			mg/L	0.6	3	04/17/07 1:57	djt
Sodium, dissolved	M200.7 ICP	121			mg/L	0.6	3	04/17/07 1:57	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XG	Units	MDL	PCL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		140			mg/L	2	20	04/13/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Total Alkalinity		140			mg/L	2	20	04/13/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-0.6			%			04/26/07 0:00	calc
Sum of Anions		40.4			meq/L	0.1	0.5	04/26/07 0:00	calc
Sum of Cations		39.9			meq/L	0.1	0.5	04/26/07 0:00	calc
Chloride	M325.2 - Colorimetric	120			mg/L	10	50	04/18/07 11:34	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/16/07 15:17	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.12			mg/L	0.02	0.1	04/20/07 18:17	nps
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2750			mg/L	10	20	04/12/07 13:42	seb
Sulfate	SM4500 SO4-D	1630			mg/L	10	50	04/12/07 16:06	aeh/wpa
TDS (calculated)	Calculation	2570			mg/L	10	50	04/26/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.07						04/26/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-21

ACZ Sample ID: **L61943-05**
 Date Sampled: 04/09/07 10:26
 Date Received: 04/11/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	454			mg/L	0.4	2	04/17/07 2:01	djt
Magnesium, dissolved	M200.7 ICP	120			mg/L	0.4	2	04/18/07 19:11	msh
Potassium, dissolved	M200.7 ICP	9.6			mg/L	0.6	3	04/17/07 2:01	djt
Sodium, dissolved	M200.7 ICP	132			mg/L	0.6	3	04/17/07 2:01	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		134	H		mg/L	2	20	04/24/07 0:00	cas
Carbonate as CaCO3			UH		mg/L	2	20	04/24/07 0:00	cas
Hydroxide as CaCO3			UH		mg/L	2	20	04/24/07 0:00	cas
Total Alkalinity		134	H	*	mg/L	2	20	04/24/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-3.0			%			04/26/07 0:00	calc
Sum of Anions		41.0			meq/L	0.1	0.5	04/26/07 0:00	calc
Sum of Cations		38.6			meq/L	0.1	0.5	04/26/07 0:00	calc
Chloride	M325.2 - Colorimetric	130			mg/L	10	50	04/18/07 13:19	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/16/07 15:38	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.63			mg/L	0.02	0.1	04/20/07 18:18	nps
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2770			mg/L	10	20	04/12/07 13:44	seb
Sulfate	SM4500 SO4-D	1650			mg/L	10	50	04/12/07 16:10	aeh/wpa
TDS (calculated)	Calculation	2580			mg/L	10	50	04/26/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.07						04/26/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: IW-22

ACZ Sample ID: **L61943-06**

Date Sampled: 04/09/07 13:35

Date Received: 04/11/07

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	523			mg/L	0.4	2	04/17/07 2:05	djt
Magnesium, dissolved	M200.7 ICP	85.1			mg/L	0.4	2	04/18/07 19:15	msh
Potassium, dissolved	M200.7 ICP	10.2			mg/L	0.6	3	04/17/07 2:05	djt
Sodium, dissolved	M200.7 ICP	194			mg/L	0.6	3	04/17/07 2:05	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		137			mg/L	2	20	04/13/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Total Alkalinity		137			mg/L	2	20	04/13/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-1.2			%			04/26/07 0:00	calc
Sum of Anions		42.9			meq/L	0.1	0.5	04/26/07 0:00	calc
Sum of Cations		41.9			meq/L	0.1	0.5	04/26/07 0:00	calc
Chloride	M325.2 - Colorimetric	130			mg/L	10	50	04/18/07 12:54	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/16/07 15:45	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.90			mg/L	0.02	0.1	04/20/07 18:20	nps
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2950			mg/L	10	20	04/12/07 13:45	seb
Sulfate	SM4500 SO4-D	1740			mg/L	10	50	04/12/07 16:13	aeh/wpa
TDS (calculated)	Calculation	2760			mg/L	10	50	04/26/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.07						04/26/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: DUP040907A

ACZ Sample ID: **L61943-07**
 Date Sampled: 04/09/07 00:00
 Date Received: 04/11/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	488			mg/L	0.4	2	04/17/07 2:09	djt
Magnesium, dissolved	M200.7 ICP	94.9			mg/L	0.4	2	04/18/07 19:19	msh
Potassium, dissolved	M200.7 ICP	8.8			mg/L	0.6	3	04/17/07 2:09	djt
Sodium, dissolved	M200.7 ICP	202			mg/L	0.6	3	04/17/07 2:09	djt

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		123			mg/L	2	20	04/13/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/13/07 0:00	cas
Total Alkalinity		123			mg/L	2	20	04/13/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-2.1			%			04/26/07 0:00	calc
Sum of Anions		43.1			meq/L	0.1	0.5	04/26/07 0:00	calc
Sum of Cations		41.3			meq/L	0.1	0.5	04/26/07 0:00	calc
Chloride	M325.2 - Colorimetric	130			mg/L	10	50	04/18/07 13:00	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/16/07 15:52	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.88			mg/L	0.02	0.1	04/20/07 18:21	nps
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2900			mg/L	10	20	04/12/07 13:46	seb
Sulfate	SM4500 SO4-D	1760			mg/L	10	50	04/12/07 16:16	aeh/wpa
TDS (calculated)	Calculation	2760			mg/L	10	50	04/26/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.05						04/26/07 0:00	calc

Arizona license number: AZ0102

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of Interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of Interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
U	Analyte was analyzed for but not detected at the indicated MDL

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Phelps Dodge Sierrita

ACZ Project ID: **L61943**

Project ID: OJ03DL

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223094													
WG223094LCSW2	LCSW	04/13/07 16:28	WC070404-1	820		750.8	mg/L	91.6	80	120			
WG223094LCSW5	LCSW	04/13/07 19:40	WC070404-1	820		810.9	mg/L	98.9	80	120			
L61943-02DUP	DUP	04/13/07 20:57			117	115.8	mg/L				1	20	
L61970-05DUP	DUP	04/13/07 22:19			127	127.4	mg/L				0.3	20	
WG223094LCSW8	LCSW	04/13/07 22:33	WC070404-1	820		815.8	mg/L	99.5	80	120			
WG223572													
WG223572LCSW2	LCSW	04/24/07 12:20	WC070421-1	820		802.3	mg/L	97.8	80	120			
L62067-02DUP	DUP	04/24/07 13:57			26	26.3	mg/L				1.1	20	
WG223572LCSW5	LCSW	04/24/07 15:27	WC070421-1	820		808	mg/L	98.5	80	120			
WG223572LCSW8	LCSW	04/24/07 18:47	WC070421-1	820		807.2	mg/L	98.4	80	120			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223191													
WG223191ICV	ICV	04/17/07 0:45	I1070403-5	2		1.899	mg/L	95	95	105			
WG223191ICB	ICB	04/17/07 0:49				U	mg/L		-0.09	0.09			
WG223191LFB	LFB	04/17/07 1:05	I1070328-2	1		.956	mg/L	95.6	85	115			
L61935-02AS	AS	04/17/07 1:17	I1070328-2	1	U	1.051	mg/L	105.1	85	115			
L61935-02ASD	ASD	04/17/07 1:21	I1070328-2	1	U	1.053	mg/L	105.3	85	115	0.19	20	
L61959-01AS	AS	04/17/07 2:33	I1070328-2	1	U	.985	mg/L	98.5	85	115			
L61959-01ASD	ASD	04/17/07 2:37	I1070328-2	1	U	1.084	mg/L	108.4	85	115	9.57	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223040													
WG223040ICV	ICV	04/12/07 21:11	MS070308-2	.02		.02004	mg/L	100.2	90	110			
WG223040ICB	ICB	04/12/07 21:17				.00056	mg/L		-0.0012	0.0012			
WG223040LFB	LFB	04/12/07 21:23	MS070227-3	.00625		.00619	mg/L	99	85	115			
L61913-07AS	AS	04/12/07 21:40	MS070227-3	.00625	U	.00515	mg/L	82.4	70	130			
L61913-07ASD	ASD	04/12/07 21:46	MS070227-3	.00625	U	.00538	mg/L	86.1	70	130	4.37	20	
L61943-07AS	AS	04/12/07 22:55	MS070227-3	.00625	U	.00531	mg/L	85	70	130			
L61943-07ASD	ASD	04/12/07 23:01	MS070227-3	.00625	U	.00562	mg/L	89.9	70	130	5.67	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223040													
WG223040ICV	ICV	04/12/07 21:11	MS070308-2	.05		.05207	mg/L	104.1	90	110			
WG223040ICB	ICB	04/12/07 21:17				U	mg/L		-0.0015	0.0015			
WG223040LFB	LFB	04/12/07 21:23	MS070227-3	.05		.05278	mg/L	105.6	85	115			
L61913-07AS	AS	04/12/07 21:40	MS070227-3	.05	.0016	.05125	mg/L	99.3	70	130			
L61913-07ASD	ASD	04/12/07 21:46	MS070227-3	.05	.0016	.0522	mg/L	101.2	70	130	1.84	20	
L61943-07AS	AS	04/12/07 22:55	MS070227-3	.05	.0018	.05415	mg/L	104.7	70	130			
L61943-07ASD	ASD	04/12/07 23:01	MS070227-3	.05	.0018	.05445	mg/L	105.3	70	130	0.55	20	

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 Project ID: OJ03DL

ACZ Project ID: L61943

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223191													
WG223191ICV	ICV	04/17/07 0:45	II070403-5	2		1.9756	mg/L	98.8	95	105			
WG223191ICB	ICB	04/17/07 0:49				U	mg/L		-0.009	0.009			
WG223191LFB	LFB	04/17/07 1:05	II070328-2	.5		.4954	mg/L	99.1	85	115			
L61935-02AS	AS	04/17/07 1:17	II070328-2	.5	.054	.5568	mg/L	100.6	85	115			
L61935-02ASD	ASD	04/17/07 1:21	II070328-2	.5	.054	.5598	mg/L	101.2	85	115	0.54	20	
L61959-01AS	AS	04/17/07 2:33	II070328-2	.5	.067	.5652	mg/L	99.6	85	115			
L61959-01ASD	ASD	04/17/07 2:37	II070328-2	.5	.067	.5631	mg/L	99.2	85	115	0.37	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223040													
WG223040ICV	ICV	04/12/07 21:11	MS070308-2	.05		.04984	mg/L	99.7	90	110			
WG223040ICB	ICB	04/12/07 21:17				U	mg/L		-0.0003	0.0003			
WG223040LFB	LFB	04/12/07 21:23	MS070227-3	.05		.04917	mg/L	98.3	85	115			
L61913-07AS	AS	04/12/07 21:40	MS070227-3	.05	U	.04194	mg/L	83.9	70	130			
L61913-07ASD	ASD	04/12/07 21:46	MS070227-3	.05	U	.04206	mg/L	84.1	70	130	0.29	20	
L61943-07AS	AS	04/12/07 22:55	MS070227-3	.05	.0001	.04076	mg/L	81.3	70	130			
L61943-07ASD	ASD	04/12/07 23:01	MS070227-3	.05	.0001	.04057	mg/L	80.9	70	130	0.47	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223040													
WG223040ICV	ICV	04/12/07 21:11	MS070308-2	.05		.05157	mg/L	103.1	90	110			
WG223040ICB	ICB	04/12/07 21:17				U	mg/L		-0.0003	0.0003			
WG223040LFB	LFB	04/12/07 21:23	MS070227-3	.05		.05093	mg/L	101.9	85	115			
L61913-07AS	AS	04/12/07 21:40	MS070227-3	.05	.0044	.04763	mg/L	86.5	70	130			
L61913-07ASD	ASD	04/12/07 21:46	MS070227-3	.05	.0044	.04804	mg/L	87.3	70	130	0.86	20	
L61943-07AS	AS	04/12/07 22:55	MS070227-3	.05	.0003	.04616	mg/L	91.7	70	130			
L61943-07ASD	ASD	04/12/07 23:01	MS070227-3	.05	.0003	.04687	mg/L	93.1	70	130	1.53	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223191													
WG223191ICV	ICV	04/17/07 0:45	II070403-5	100		94.64	mg/L	94.6	95	105			
WG223191ICB	ICB	04/17/07 0:49				U	mg/L		-0.6	0.6			
WG223191LFB	LFB	04/17/07 1:05	II070328-2	67.97554		65.3	mg/L	96.1	85	115			
L61935-02AS	AS	04/17/07 1:17	II070328-2	67.97554	118	179.37	mg/L	90.3	85	115			
L61935-02ASD	ASD	04/17/07 1:21	II070328-2	67.97554	118	179.99	mg/L	91.2	85	115	0.35	20	
L61959-01AS	AS	04/17/07 2:33	II070328-2	67.97554	117	175.59	mg/L	86.2	85	115			
L61959-01ASD	ASD	04/17/07 2:37	II070328-2	67.97554	117	180.25	mg/L	93	85	115	2.62	20	

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 Project ID: OJ03DL

ACZ Project ID: **L61943**

Chloride M325.2 - Colorimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223268													
WG223268ICB	ICB	04/18/07 10:30				U	mg/L		-3	3			
WG223268ICV	ICV	04/18/07 10:30	WI070314-1	55		60	mg/L	109.1	90	110			
L61935-01AS	AS	04/18/07 11:24	WI070205-1	30	16	46.8	mg/L	102.7	90	110			
L61935-02DUP	DUP	04/18/07 11:24			10	9.9	mg/L				1	20	
WG223268LFB1	LFB	04/18/07 12:44	WI070205-1	30		31.9	mg/L	106.3	90	110			
WG223268LFB2	LFB	04/18/07 12:45	WI070205-1	30		31.7	mg/L	105.7	90	110			
L61943-06AS	AS	04/18/07 13:00	10XCL	30	130	162	mg/L	106.7	90	110			
L61943-07DUP	DUP	04/18/07 13:00			130	130	mg/L				0	20	
WG223268LFB3	LFB	04/18/07 13:04	WI070205-1	30		30	mg/L	100	90	110			

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223212													
WG223212ICV	ICV	04/18/07 17:51	II070403-5	2		1.92	mg/L	96	95	105			
WG223212ICB	ICB	04/18/07 17:55				U	mg/L		-0.03	0.03			
WG223212LFB	LFB	04/18/07 18:12	II070328-2	.5		.514	mg/L	102.8	85	115			
L61935-02AS	AS	04/18/07 18:25	II070328-2	.5	U	.532	mg/L	106.4	85	115			
L61935-02ASD	ASD	04/18/07 18:29	II070328-2	.5	U	.53	mg/L	106	85	115	0.38	20	
L61959-01AS	AS	04/18/07 19:44	II070328-2	.5	U	.515	mg/L	103	85	115			
L61959-01ASD	ASD	04/18/07 19:48	II070328-2	.5	U	.522	mg/L	104.4	85	115	1.35	20	

Cobalt, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223212													
WG223212ICV	ICV	04/18/07 17:51	II070403-5	2		1.897	mg/L	94.9	95	105			
WG223212ICB	ICB	04/18/07 17:55				U	mg/L		-0.03	0.03			
WG223212LFB	LFB	04/18/07 18:12	II070328-2	.5		.518	mg/L	103.6	85	115			
L61935-02AS	AS	04/18/07 18:25	II070328-2	.5	U	.54	mg/L	108	85	115			
L61935-02ASD	ASD	04/18/07 18:29	II070328-2	.5	U	.528	mg/L	105.6	85	115	2.25	20	
L61959-01AS	AS	04/18/07 19:44	II070328-2	.5	U	.516	mg/L	103.2	85	115			
L61959-01ASD	ASD	04/18/07 19:48	II070328-2	.5	U	.523	mg/L	104.6	85	115	1.35	20	

Conductivity @25C M120.1 - Meter

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223094													
WG223094PBW1	PBW	04/13/07 16:16				U	µmhos/cm		-10	10			
WG223094LCSW1	LCSW	04/13/07 16:17	PCN26780	1408.8		1673	µmhos/cm	118.8	80	120			
WG223094PBW2	PBW	04/13/07 19:29				2.9	µmhos/cm		-10	10			
WG223094LCSW4	LCSW	04/13/07 19:30	PCN26780	1408.8		1673	µmhos/cm	118.8	80	120			
L61943-02DUP	DUP	04/13/07 20:57			3780	3770	µmhos/cm				0.3	20	
L61970-05DUP	DUP	04/13/07 22:19			5100	5060	µmhos/cm				0.8	20	
WG223094LCSW7	LCSW	04/13/07 22:20	PCN26780	1408.8		1676	µmhos/cm	119	80	120			

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 Project ID: OJ03DL

ACZ Project ID: L61943

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223212													
WG223212ICV	ICV	04/18/07 17:51	II070403-5	2		1.915	mg/L	95.8	95	105			
WG223212ICB	ICB	04/18/07 17:55				U	mg/L		-0.03	0.03			
WG223212LFB	LFB	04/18/07 18:12	II070328-2	.5		.518	mg/L	103.6	85	115			
L61935-02AS	AS	04/18/07 18:25	II070328-2	.5	U	.549	mg/L	109.8	85	115			
L61935-02ASD	ASD	04/18/07 18:29	II070328-2	.5	U	.544	mg/L	108.8	85	115	0.91	20	
L61959-01AS	AS	04/18/07 19:44	II070328-2	.5	U	.523	mg/L	104.6	85	115			
L61959-01ASD	ASD	04/18/07 19:48	II070328-2	.5	U	.528	mg/L	105.6	85	115	0.95	20	

Cyanide, total M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223367													
WG223367ICV	ICV	04/19/07 14:50	WI070412-6	.3		.3003	mg/L	100.1	90	110			
WG223367ICB	ICB	04/19/07 14:51				U	mg/L		-0.015	0.015			
WG223143LRB	LRB	04/19/07 14:52				U	mg/L		-0.015	0.015			
WG223143LFB	LFB	04/19/07 14:53	WI070412-2	.2		.2145	mg/L	107.3	90	110			
L61913-06DUP	DUP	04/19/07 14:54			U	U	mg/L				0	20	RA
L61913-07LFM	LFM	04/19/07 14:56	WI070412-2	.2	U	.2155	mg/L	107.8	90	110			
L61949-01DUP	DUP	04/19/07 15:07			U	U	mg/L				0	20	RA
L61949-02LFM	LFM	04/19/07 15:09	WI070412-2	.2	U	.1968	mg/L	98.4	90	110			
WG223144LRB	LRB	04/19/07 15:18				U	mg/L		-0.015	0.015			
WG223144LFB	LFB	04/19/07 15:19	WI070412-2	.2		.2099	mg/L	105	90	110			
L61971-01DUP	DUP	04/19/07 15:21			U	U	mg/L				0	20	RA
L61971-02LFM	LFM	04/19/07 15:25	WI070412-2	.2	U	.2119	mg/L	106	90	110			

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223129													
WG223129ICV1	ICV	04/16/07 10:07	WC070407-2	1.992		2.06	mg/L	103.4	95	105			
WG223129ICB	ICB	04/16/07 10:13				U	mg/L		-0.3	0.3			
WG223129LFB1	LFB	04/16/07 10:20	WC070213-5	5		5.39	mg/L	107.8	90	110			
WG223129LFB2	LFB	04/16/07 13:25	WC070213-5	5		5.27	mg/L	105.4	90	110			
L61943-04AS	AS	04/16/07 15:24	WC070213-5	5	.2	5.32	mg/L	102.4	85	115			
L61943-04DUP	DUP	04/16/07 15:31			.2	.28	mg/L				33.3	20	RA

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223291													
WG223291ICV	ICV	04/18/07 20:44	II070403-5	2		1.959	mg/L	98	95	105			
WG223291ICB	ICB	04/18/07 20:48				U	mg/L		-0.06	0.06			
WG223291LFB	LFB	04/18/07 21:05	II070328-2	1		1.006	mg/L	100.6	85	115			
L61943-01AS	AS	04/18/07 21:13	II070328-2	1	U	1	mg/L	100	85	115			
L61943-01ASD	ASD	04/18/07 21:17	II070328-2	1	U	1.009	mg/L	100.9	85	115	0.9	20	

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: L61943

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec.	Lower	Upper	RPD	Limit	Qual
WG223040													
WG223040ICV	ICV	04/12/07 21:11	MS070308-2	.05		.05358	mg/L	107.2	90	110			
WG223040ICB	ICB	04/12/07 21:17				U	mg/L		-0.0003	0.0003			
WG223040LFB	LFB	04/12/07 21:23	MS070227-3	.05		.05178	mg/L	103.6	85	115			
L61913-07AS	AS	04/12/07 21:40	MS070227-3	.05	.0008	.05602	mg/L	110.4	70	130			
L61913-07ASD	ASD	04/12/07 21:46	MS070227-3	.05	.0008	.05688	mg/L	112.2	70	130	1.52	20	
L61943-07AS	AS	04/12/07 22:55	MS070227-3	.05	.0006	.05447	mg/L	107.7	70	130			
L61943-07ASD	ASD	04/12/07 23:01	MS070227-3	.05	.0006	.05503	mg/L	108.9	70	130	1.02	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec.	Lower	Upper	RPD	Limit	Qual
WG223212													
WG223212ICV	ICV	04/18/07 17:51	11070403-5	100		96.87	mg/L	96.9	95	105			
WG223212ICB	ICB	04/18/07 17:55				U	mg/L		-0.6	0.6			
WG223212LFB	LFB	04/18/07 18:12	11070328-2	54.9596		55.34	mg/L	100.7	85	115			
L61935-02AS	AS	04/18/07 18:25	11070328-2	54.9596	90.5	147.46	mg/L	103.6	85	115			
L61935-02ASD	ASD	04/18/07 18:29	11070328-2	54.9596	90.5	146.15	mg/L	101.3	85	115	0.89	20	
L61959-01AS	AS	04/18/07 19:44	11070328-2	54.9596	61.2	114.55	mg/L	97.1	85	115			
L61959-01ASD	ASD	04/18/07 19:48	11070328-2	54.9596	61.2	120.86	mg/L	108.6	85	115	5.36	20	

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec.	Lower	Upper	RPD	Limit	Qual
WG223212													
WG223212ICV	ICV	04/18/07 17:51	11070403-5	2		1.9135	mg/L	95.7	95	105			
WG223212ICB	ICB	04/18/07 17:55				U	mg/L		-0.015	0.015			
WG223212LFB	LFB	04/18/07 18:12	11070328-2	.5		.5523	mg/L	110.5	85	115			
L61935-02AS	AS	04/18/07 18:25	11070328-2	.5	.097	.6562	mg/L	111.8	85	115			
L61935-02ASD	ASD	04/18/07 18:29	11070328-2	.5	.097	.6485	mg/L	110.3	85	115	1.18	20	
L61959-01AS	AS	04/18/07 19:44	11070328-2	.5	.008	.549	mg/L	108.2	85	115			
L61959-01ASD	ASD	04/18/07 19:48	11070328-2	.5	.008	.5584	mg/L	110.1	85	115	1.7	20	

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: L61943

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223014													
WG223014ICV	ICV	04/12/07 15:34	11070406-1	.00498		.00503	mg/L	101	95	105			
WG223014ICB	ICB	04/12/07 15:36				U	mg/L		-0.0002	0.0002			
WG222976													
WG222976LRB	LRB	04/12/07 17:04				U	mg/L		-0.00044	0.00044			
WG222976LFB	LFB	04/12/07 17:07	11070402-4	.002		.0022	mg/L	110	85	115			
L61914-04LFM	LFM	04/12/07 17:41	11070402-4	.002	U	.00216	mg/L	108	85	115			
L61914-04LFMD	LFMD	04/12/07 17:43	11070402-4	.002	U	.00214	mg/L	107	85	115	0.93	20	
WG223031													
WG223031ICV	ICV	04/13/07 13:56	11070406-1	.00498		.00505	mg/L	101.4	90	110			
WG223031ICB	ICB	04/13/07 13:59				U	mg/L		-0.0006	0.0006			
WG223071													
WG223071LRB	LRB	04/13/07 15:12				U	mg/L		-0.00044	0.00044			
WG223071LFB	LFB	04/13/07 15:14	11070411-6	.002		.00201	mg/L	100.5	85	115			
L61927-02LFM	LFM	04/13/07 15:19	11070411-6	.002	U	.00223	mg/L	111.5	85	115			
L61927-02LFMD	LFMD	04/13/07 15:21	11070411-6	.002	U	.00215	mg/L	107.5	85	115	3.65	20	

Molybdenum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223191													
WG223191ICV	ICV	04/17/07 0:45	11070403-5	2		1.898	mg/L	94.9	95	105			
WG223191ICB	ICB	04/17/07 0:49				U	mg/L		-0.03	0.03			
WG223191LFB	LFB	04/17/07 1:05	11070328-2	.5		.483	mg/L	96.6	85	115			
L61935-02AS	AS	04/17/07 1:17	11070328-2	.5	U	.5	mg/L	100	85	115			
L61935-02ASD	ASD	04/17/07 1:21	11070328-2	.5	U	.507	mg/L	101.4	85	115	1.39	20	
L61959-01AS	AS	04/17/07 2:33	11070328-2	.5	U	.487	mg/L	97.4	85	115			
L61959-01ASD	ASD	04/17/07 2:37	11070328-2	.5	U	.524	mg/L	104.8	85	115	7.32	20	

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223212													
WG223212ICV	ICV	04/18/07 17:51	11070403-5	2		1.891	mg/L	94.6	95	105			
WG223212ICB	ICB	04/18/07 17:55				U	mg/L		-0.03	0.03			
WG223212LFB	LFB	04/18/07 18:12	11070328-2	.5		.509	mg/L	101.8	85	115			
L61935-02AS	AS	04/18/07 18:25	11070328-2	.5	U	.528	mg/L	105.6	85	115			
L61935-02ASD	ASD	04/18/07 18:29	11070328-2	.5	U	.524	mg/L	104.8	85	115	0.76	20	
L61959-01AS	AS	04/18/07 19:44	11070328-2	.5	U	.502	mg/L	100.4	85	115			
L61959-01ASD	ASD	04/18/07 19:48	11070328-2	.5	U	.51	mg/L	102	85	115	1.58	20	

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: L61943

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223439													
WG223439ICV	ICV	04/20/07 17:23	WI070308-3	2.416		2.406	mg/L	99.6	90	110			
WG223439ICB	ICB	04/20/07 17:24				U	mg/L		-0.06	0.06			
WG223439LFB1	LFB	04/20/07 17:27	WI070307-9	2		2.09	mg/L	104.5	90	110			
WG223439LFB2	LFB	04/20/07 18:05	WI070307-9	2		1.966	mg/L	98.3	90	110			
L61943-01DUP	DUP	04/20/07 18:14			1.06	1.083	mg/L				2.1	20	
L61914-11AS	AS	04/20/07 18:53	WI070307-9	20	6.9	27.33	mg/L	102.2	90	110			

pH (lab) M150.1 - Electrometric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223094													
WG223094LCSW3	LCSW	04/13/07 16:31	PCN25442	6		6.08	units	101.3	90	110			
WG223094LCSW6	LCSW	04/13/07 19:43	PCN25442	6		6.06	units	101	90	110			
L61943-02DUP	DUP	04/13/07 20:57			7.9	7.89	units				0.1	20	
L61970-05DUP	DUP	04/13/07 22:19			7.8	7.79	units				0.1	20	
WG223094LCSW9	LCSW	04/13/07 22:37	PCN25442	6		6.06	units	101	90	110			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223191													
WG223191ICV	ICV	04/17/07 0:45	II070403-5	20		19.51	mg/L	97.6	95	105			
WG223191ICB	ICB	04/17/07 0:49				U	mg/L		-0.9	0.9			
WG223191LFB	LFB	04/17/07 1:05	II070328-2	99.61502		95.35	mg/L	95.7	85	115			
L61935-02AS	AS	04/17/07 1:17	II070328-2	99.61502	4	106.52	mg/L	102.9	85	115			
L61935-02ASD	ASD	04/17/07 1:21	II070328-2	99.61502	4	107.77	mg/L	104.2	85	115	1.17	20	
L61959-01AS	AS	04/17/07 2:33	II070328-2	99.61502	4.6	102.76	mg/L	98.5	85	115			
L61959-01ASD	ASD	04/17/07 2:37	II070328-2	99.61502	4.6	111.64	mg/L	107.5	85	115	8.28	20	

Residue, Filterable (TDS) @180C M160.1 - Gravimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223038													
WG223038PBW	PBW	04/12/07 13:35				U	mg/L		-20	20			
WG223038LCSW	LCSW	04/12/07 13:36	PCN26761	260		260	mg/L	100	80	120			
L61960-03DUP	DUP	04/12/07 13:50			260	270	mg/L				3.8	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223040													
WG223040ICV	ICV	04/12/07 21:11	MS070308-2	.05		.05383	mg/L	107.7	90	110			
WG223040ICB	ICB	04/12/07 21:17				U	mg/L		-0.0003	0.0003			
WG223040LFB	LFB	04/12/07 21:23	MS070227-3	.05		.05052	mg/L	101	85	115			
L61913-07AS	AS	04/12/07 21:40	MS070227-3	.05	.01	.06969	mg/L	119.4	70	130			
L61913-07ASD	ASD	04/12/07 21:46	MS070227-3	.05	.01	.07098	mg/L	122	70	130	1.83	20	
L61943-07AS	AS	04/12/07 22:55	MS070227-3	.05	.0021	.06242	mg/L	120.6	70	130			
L61943-07ASD	ASD	04/12/07 23:01	MS070227-3	.05	.0021	.062	mg/L	119.8	70	130	0.68	20	

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 Project ID: OJ03DL

ACZ Project ID: L61943

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223191													
WG223191ICV	ICV	04/17/07 0:45	II070403-5	100		98.18	mg/L	98.2	95	105			
WG223191ICB	ICB	04/17/07 0:49				U	mg/L		-0.9	0.9			
WG223191LFB	LFB	04/17/07 1:05	II070328-2	99.92361		97.04	mg/L	97.1	85	115			
L61935-02AS	AS	04/17/07 1:17	II070328-2	99.92361	33.6	134.58	mg/L	101.1	85	115			
L61935-02ASD	ASD	04/17/07 1:21	II070328-2	99.92361	33.6	135.98	mg/L	102.5	85	115	1.03	20	
L61959-01AS	AS	04/17/07 2:33	II070328-2	99.92361	15.6	113.02	mg/L	97.5	85	115			
L61959-01ASD	ASD	04/17/07 2:37	II070328-2	99.92361	15.6	122.47	mg/L	107	85	115	8.03	20	

Sulfate SM4500 SO4-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223035													
WG223035PBW	PBW	04/12/07 13:05				U	mg/L		-30	30			
WG223035LCSW	LCSW	04/12/07 13:09	WC061207-2	100		102	mg/L	102	80	120			
L61943-03DUP	DUP	04/12/07 14:40			1760	1711	mg/L				2.8	20	
WG223058													
WG223058PBW	PBW	04/12/07 16:00				U	mg/L		-30	30			
WG223058LCSW	LCSW	04/12/07 16:03	WC061207-2	100		100	mg/L	100	80	120			
L61949-02DUP	DUP	04/12/07 16:40			230	228	mg/L				0.9	20	

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223040													
WG223040ICV	ICV	04/12/07 21:11	MS070308-2	.056		.05639	mg/L	100.7	90	110			
WG223040ICB	ICB	04/12/07 21:17				U	mg/L		-0.0003	0.0003			
WG223040LFB	LFB	04/12/07 21:23	MS070227-3	.05		.05115	mg/L	102.3	85	115			
L61913-07AS	AS	04/12/07 21:40	MS070227-3	.05	U	.05599	mg/L	112	70	130			
L61913-07ASD	ASD	04/12/07 21:46	MS070227-3	.05	U	.05672	mg/L	113.4	70	130	1.3	20	
L61943-07AS	AS	04/12/07 22:55	MS070227-3	.05	U	.0546	mg/L	109.2	70	130			
L61943-07ASD	ASD	04/12/07 23:01	MS070227-3	.05	U	.05495	mg/L	109.9	70	130	0.64	20	

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223191													
WG223191ICV	ICV	04/17/07 0:45	II070403-5	2		1.895	mg/L	94.8	95	105			
WG223191ICB	ICB	04/17/07 0:49				U	mg/L		-0.03	0.03			
WG223191LFB	LFB	04/17/07 1:05	II070328-2	.5		.499	mg/L	99.8	85	115			
L61935-02AS	AS	04/17/07 1:17	II070328-2	.5	U	.522	mg/L	104.4	85	115			
L61935-02ASD	ASD	04/17/07 1:21	II070328-2	.5	U	.523	mg/L	104.6	85	115	0.19	20	
L61959-01AS	AS	04/17/07 2:33	II070328-2	.5	.04	.505	mg/L	93	85	115			
L61959-01ASD	ASD	04/17/07 2:37	II070328-2	.5	.04	.55	mg/L	102	85	115	8.53	20	

Phelps Dodge Sierrita

ACZ Project ID: **L61943**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L61943-01	WG223367	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223129	Fluoride	SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61943-02	WG223367	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223129	Fluoride	SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61943-03	WG223367	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223129	Fluoride	SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61943-04	WG223367	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223129	Fluoride	SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61943-05	WG223367	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223129	Fluoride	SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223572	Total Alkalinity	SM2320B - Titration	C4	Confirmatory analysis was past holding time.
L61943-06	WG223367	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223129	Fluoride	SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61943-07	WG223367	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223129	Fluoride	SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

helps Dodge Sierrita

ACZ Project ID: **L61943**

GC/MS

The following parameters are not offered for certification or are not covered by NELAP certificate #ACZ

Volatile Organics by GC/MS

M8260B GC/MS

Phelps Dodge Sierrita
OJ03DL

ACZ Project ID: L61943
Date Received: 4/11/2007
Received By:
Date Printed: 4/11/2007

Receipt Verification

	YES	NO	NA	
1) Does this project require special handling procedures such as CLP protocol?			X	
2) Are the custody seals on the cooler intact?	X			
3) Are the custody seals on the sample containers intact?			X	
4) Is there a Chain of Custody or other directive shipping papers present?	X			
5) Is the Chain of Custody complete?	X			
6) Is the Chain of Custody in agreement with the samples received?	X			
7) Is there enough sample for all requested analyses?	X			
8) Are all samples within holding times for requested analyses?	X			
9) Were all sample containers received intact?	X			
10) Are the temperature blanks present?				X
11) Are the trip blanks (VOA and/or Cyanide) present?		X		
12) Are samples requiring no headspace, headspace free?	X			
13) Do the samples that require a Foreign Soils Permit have one?			X	

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

The client was not contacted.

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
196	5.7	16

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Phelps Dodge Sierrita
OJ03DL

ACZ Project ID: L61943
Date Received: 4/11/2007
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L61943-01	PZ-7		Y		Y							<input type="checkbox"/>
L61943-02	MH-30		Y		Y							<input type="checkbox"/>
L61943-03	IW-11		Y		Y							<input type="checkbox"/>
L61943-04	IW-19		Y		Y							<input type="checkbox"/>
L61943-05	IW-21		Y		Y							<input type="checkbox"/>
L61943-06	IW-22		Y		Y							<input type="checkbox"/>
L61943-07	DUP040907A		Y		Y							<input type="checkbox"/>

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

600114

ACZ Laboratories, Inc.

CHAIN of CUSTODY

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-6493

Report to:

Name: *Billy Dorris*
 Company: *Phelps Dodge Sierrita*
 E-mail: *Billy-Dorris@FMI.com*

Address: *6200 West Duval Mine Rd
 Green Valley, AZ 85614*
 Telephone: *520 648 8873*

Copy of Report to:

Name: *Jim Norris*
 Company: *Hydro Geo Chem*

E-mail: *jimn@hgcinc.com*
 Telephone: *520-293-1500 Ext 112*

Invoice to:

Name:
 Company:
 E-mail:

Address:
 Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES
NO
 If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #:
 Project/PO #: *OJ03 DL*
 Reporting state for compliance testing:
 Sampler's Name:
 Are any samples NRC licensable material?

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers																
<i>PZ-7</i>	<i>4-9-07 / 9:24</i>	<i>GW</i>	<i>9</i>																
<i>MH-30</i>	<i>4-9-07 / 10:16</i>	<i>GW</i>	<i>9</i>	}	<i>AMBIENT</i>														
<i>IW-11</i>	<i>4-9-07 / 13:45</i>	<i>GW</i>	<i>9</i>																
<i>IW-19</i>	<i>4-9-07 / 10:40</i>	<i>GW</i>	<i>9</i>																
<i>IW-21</i>	<i>4-9-07 / 10:26</i>	<i>GW</i>	<i>9</i>	}	<i>SUITE</i>														
<i>IW-22</i>	<i>4-9-07 / 13:35</i>	<i>GW</i>	<i>9</i>																
<i>DUP040907A</i>	<i>4-9-07</i>	<i>GW</i>	<i>9</i>																

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
<i>Billy F. Dorris</i>	<i>4-9-07/2:30</i>	<i>MRS</i>	<i>4-11-07 9:05</i>

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

April 27, 2007

Bill Dorris
Phelps Dodge Sierrita
P.O. Box 527
6200 West Duval Mine Road
Green Valley, AZ 85622-0527

Cc: Jim Norris

Project ID: OJ03DL
ACZ Project ID: L62040 - SHORT

Bill Dorris:

Enclosed are revised analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 17, 2007 and reported on April 27, 2007. This project was assigned to ACZ's project number, L62040. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L62040. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

This report should be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.

27/Apr/07

Tony Antalek, Project Manager, has reviewed and approved this report in its entirety.



REPAD.01.11.00.01

Phelps Dodge Sierrita

Project ID: OJ03DL
Sample ID: MH-25C

ACZ Sample ID: **L62040-01**
Date Sampled: 04/13/07 08:55
Date Received: 04/17/07
Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	390			mg/L	0.2	1	04/20/07 20:17	msh
Magnesium, dissolved	M200.7 ICP	93.6			mg/L	0.2	1	04/20/07 20:17	msh
Potassium, dissolved	M200.7 ICP	12.0			mg/L	0.3	2	04/20/07 20:17	msh
Sodium, dissolved	M200.7 ICP	113			mg/L	0.3	2	04/20/07 20:17	msh

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		95			mg/L	2	20	04/21/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Total Alkalinity		95			mg/L	2	20	04/21/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		1.6			%			04/27/07 0:00	calc
Sum of Anions		31.5			meq/L	0.1	0.5	04/27/07 0:00	calc
Sum of Cations		32.5			meq/L	0.1	0.5	04/27/07 0:00	calc
Chloride	M325.2 - Colorimetric	110		*	mg/L	10	50	04/19/07 11:13	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/23/07 15:14	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.75		*	mg/L	0.02	0.1	04/26/07 18:00	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2200			mg/L	10	20	04/18/07 16:07	seb
Sulfate	SM4500 SO4-D	1260			mg/L	10	50	04/18/07 11:09	aeh/wpa
TDS (calculated)	Calculation	2040			mg/L	10	50	04/27/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.08						04/27/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-13

ACZ Sample ID: **L62040-02**
 Date Sampled: 04/16/07 14:10
 Date Received: 04/17/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	522			mg/L	0.2	1	04/20/07 20:21	msh
Magnesium, dissolved	M200.7 ICP	101			mg/L	0.2	1	04/20/07 20:21	msh
Potassium, dissolved	M200.7 ICP	7.6			mg/L	0.3	2	04/20/07 20:21	msh
Sodium, dissolved	M200.7 ICP	223			mg/L	0.3	2	04/20/07 20:21	msh

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		111			mg/L	2	20	04/21/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Total Alkalinity		111			mg/L	2	20	04/21/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		4.2			%			04/27/07 0:00	calc
Sum of Anions		40.8			meq/L	0.1	0.5	04/27/07 0:00	calc
Sum of Cations		44.4			meq/L	0.1	0.5	04/27/07 0:00	calc
Chloride	M325.2 - Colorimetric	110		*	mg/L	10	50	04/19/07 11:13	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/23/07 15:21	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.43		*	mg/L	0.02	0.1	04/26/07 18:04	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	3060			mg/L	10	20	04/18/07 16:09	seb
Sulfate	SM4500 SO4-D	1690			mg/L	10	50	04/18/07 11:13	aeh/wpa
TDS (calculated)	Calculation	2720			mg/L	10	50	04/27/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.13						04/27/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: IW-14

ACZ Sample ID: **L62040-03**

Date Sampled: 04/16/07 14:00

Date Received: 04/17/07

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	540			mg/L	0.2	1	04/20/07 20:25	msh
Magnesium, dissolved	M200.7 ICP	116			mg/L	0.2	1	04/20/07 20:25	msh
Potassium, dissolved	M200.7 ICP	8.3			mg/L	0.3	2	04/20/07 20:25	msh
Sodium, dissolved	M200.7 ICP	161			mg/L	0.3	2	04/20/07 20:25	msh

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		121			mg/L	2	20	04/21/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Total Alkalinity		121			mg/L	2	20	04/21/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		0.5			%			04/27/07 0:00	calc
Sum of Anions		43.4			meq/L	0.1	0.5	04/27/07 0:00	calc
Sum of Cations		43.8			meq/L	0.1	0.5	04/27/07 0:00	calc
Chloride	M325.2 - Colorimetric	120		*	mg/L	10	50	04/19/07 11:16	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/23/07 15:28	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.43		*	mg/L	0.02	0.1	04/26/07 18:06	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	3020			mg/L	10	20	04/18/07 16:11	seb
Sulfate	SM4500 SO4-D	1790			mg/L	10	50	04/18/07 11:17	aeh/wpa
TDS (calculated)	Calculation	2810			mg/L	10	50	04/27/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.07						04/27/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-16

ACZ Sample ID: **L62040-04**
 Date Sampled: 04/16/07 13:50
 Date Received: 04/17/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	576			mg/L	0.2	1	04/20/07 20:29	msh
Magnesium, dissolved	M200.7 ICP	135			mg/L	0.2	1	04/20/07 20:29	msh
Potassium, dissolved	M200.7 ICP	7.3			mg/L	0.3	2	04/20/07 20:29	msh
Sodium, dissolved	M200.7 ICP	123			mg/L	0.3	2	04/20/07 20:29	msh

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		122			mg/L	2	20	04/21/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Total Alkalinity		122		*	mg/L	2	20	04/21/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		2.2			%			04/27/07 0:00	calc
Sum of Anions		43.5			meq/L	0.1	0.5	04/27/07 0:00	calc
Sum of Cations		45.5			meq/L	0.1	0.5	04/27/07 0:00	calc
Chloride	M325.2 - Colorimetric	140		*	mg/L	10	50	04/19/07 11:17	jag
Fluoride	SM4500F-C	0.3	B	*	mg/L	0.1	0.5	04/23/07 15:30	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.11		*	mg/L	0.02	0.1	04/26/07 18:07	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2980			mg/L	10	20	04/18/07 17:01	seb
Sulfate	SM4500 SO4-D	1770			mg/L	10	50	04/18/07 11:26	aeh/wpa
TDS (calculated)	Calculation	2820			mg/L	10	50	04/27/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.06						04/27/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-17

ACZ Sample ID: **L62040-05**
 Date Sampled: 04/16/07 13:40
 Date Received: 04/17/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	527			mg/L	0.2	1	04/20/07 20:33	msh
Magnesium, dissolved	M200.7 ICP	129			mg/L	0.2	1	04/20/07 20:33	msh
Potassium, dissolved	M200.7 ICP	7.9			mg/L	0.3	2	04/20/07 20:33	msh
Sodium, dissolved	M200.7 ICP	131			mg/L	0.3	2	04/20/07 20:33	msh

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		125			mg/L	2	20	04/21/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Total Alkalinity		125		*	mg/L	2	20	04/21/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		2.0			%			04/27/07 0:00	calc
Sum of Anions		41.2			meq/L	0.1	0.5	04/27/07 0:00	calc
Sum of Cations		42.9			meq/L	0.1	0.5	04/27/07 0:00	calc
Chloride	M325.2 - Colorimetric	130		*	mg/L	10	50	04/19/07 11:17	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/23/07 15:51	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.24		*	mg/L	0.02	0.1	04/26/07 18:08	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2860			mg/L	10	20	04/18/07 17:03	seb
Sulfate	SM4500 SO4-D	1670			mg/L	10	50	04/18/07 11:30	aeh/wpa
TDS (calculated)	Calculation	2670			mg/L	10	50	04/27/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.07						04/27/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-18

ACZ Sample ID: **L62040-06**
 Date Sampled: 04/16/07 13:25
 Date Received: 04/17/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	561			mg/L	0.2	1	04/20/07 20:38	msh
Magnesium, dissolved	M200.7 ICP	119			mg/L	0.2	1	04/20/07 20:38	msh
Potassium, dissolved	M200.7 ICP	7.8			mg/L	0.3	2	04/20/07 20:38	msh
Sodium, dissolved	M200.7 ICP	111			mg/L	0.3	2	04/20/07 20:38	msh

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		125			mg/L	2	20	04/21/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Total Alkalinity		125		*	mg/L	2	20	04/21/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		3.9			%			04/27/07 0:00	calc
Sum of Anions		39.7			meq/L	0.1	0.5	04/27/07 0:00	calc
Sum of Cations		42.9			meq/L	0.1	0.5	04/27/07 0:00	calc
Chloride	M325.2 - Colorimetric	120		*	mg/L	10	50	04/19/07 11:17	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/23/07 15:58	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.01		*	mg/L	0.02	0.1	04/26/07 18:09	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2740		*	mg/L	10	20	04/19/07 10:42	lcp
Sulfate	SM4500 SO4-D	1610			mg/L	10	50	04/18/07 11:35	aeh/wpa
TDS (calculated)	Calculation	2600			mg/L	10	50	04/27/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.05						04/27/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: DUP041607A

ACZ Sample ID: **L62040-07**
 Date Sampled: 04/16/07 00:00
 Date Received: 04/17/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	574			mg/L	0.2	1	04/20/07 20:42	msh
Magnesium, dissolved	M200.7 ICP	134			mg/L	0.2	1	04/20/07 20:42	msh
Potassium, dissolved	M200.7 ICP	7.5			mg/L	0.3	2	04/20/07 20:42	msh
Sodium, dissolved	M200.7 ICP	120			mg/L	0.3	2	04/20/07 20:42	msh

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		126			mg/L	2	20	04/21/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/21/07 0:00	cas
Total Alkalinity		126		*	mg/L	2	20	04/21/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		1.3			%			04/27/07 0:00	calc
Sum of Anions		44.0			meq/L	0.1	0.5	04/27/07 0:00	calc
Sum of Cations		45.2			meq/L	0.1	0.5	04/27/07 0:00	calc
Chloride	M325.2 - Colorimetric	140		*	mg/L	10	50	04/19/07 11:16	jag
Fluoride	SM4500F-C	0.3	B	*	mg/L	0.1	0.5	04/23/07 16:05	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.26		*	mg/L	0.04	0.2	04/26/07 18:52	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	3000		*	mg/L	10	20	04/19/07 10:43	lcp
Sulfate	SM4500 SO4-D	1790			mg/L	10	50	04/18/07 11:39	aeh/wpa
TDS (calculated)	Calculation	2840			mg/L	10	50	04/27/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.06						04/27/07 0:00	calc

Arizona license number: AZ0102



Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
U	Analyte was analyzed for but not detected at the indicated MDL

ACZ Reference

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for inorganic analyses are reported on an "as received" basis.