

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: L61914

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			
L61914-02DUP	DUP	04/13/07 18:12			626	616	µmhos/cm				1.6	20	
L61927-01DUP	DUP	04/13/07 19:27			10800	10840	µmhos/cm				0.4	20	
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			
WG223094LCSW7	LCSW	04/13/07 22:20	PCN26780	1408.8		1676	µmhos/cm	119	80	120			

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	II070403-5	2		1.933	mg/L	96.7	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.03	0.03			
WG223184LFB	LFB	04/16/07 18:05	II070328-2	.5		.493	mg/L	98.6	85	115			
L61914-01AS	AS	04/16/07 19:12	II070328-2	.5	U	.529	mg/L	105.8	85	115			
L61914-01ASD	ASD	04/16/07 19:16	II070328-2	.5	U	.53	mg/L	106	85	115	0.19	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	II070403-5	2		1.933	mg/L	96.7	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.03	0.03			
WG223189LFB	LFB	04/16/07 23:57	II070328-2	.5		.494	mg/L	98.8	85	115			
L61914-11AS	AS	04/17/07 0:05	II070328-2	.5	U	.51	mg/L	102	85	115			
L61914-11ASD	ASD	04/17/07 0:09	II070328-2	.5	U	.511	mg/L	102.2	85	115	0.2	20	

Cyanide, total M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223132													
WG223132ICV	ICV	04/14/07 20:55	WI070412-6	.3		.2963	mg/L	98.8	90	110			
WG223132ICB	ICB	04/14/07 20:56				U	mg/L		-0.015	0.015			
WG223019LRB	LRB	04/14/07 20:57				U	mg/L		-0.015	0.015			
WG223019LFB	LFB	04/14/07 20:58	WI070412-2	.2		.1914	mg/L	95.7	90	110			
L61902-01DUP	DUP	04/14/07 20:59			.095	.0951	mg/L				0.1	20	
L61902-03LFM	LFM	04/14/07 21:01	WI070412-2	.2	U	.1942	mg/L	97.1	90	110			
L61914-02DUP	DUP	04/14/07 21:12			U	U	mg/L				0	20	RA
L61914-03LFM	LFM	04/14/07 21:14	WI070412-2	.2	.079	.2951	mg/L	108.1	90	110			

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Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223051													
WG223051ICV	ICV	04/13/07 9:18	WC070329-3	1.996		2.06	mg/L	103.2	95	105			
WG223051ICB	ICB	04/13/07 9:25				U	mg/L		-0.3	0.3			
WG223051LFB1	LFB	04/13/07 9:30	WC070213-5	5		4.76	mg/L	95.2	90	110			
WG223051LFB2	LFB	04/13/07 12:23	WC070213-5	5		4.93	mg/L	98.6	90	110			
L61914-02AS	AS	04/13/07 14:27	WC070213-5	5	.4	5.15	mg/L	95	85	115			
L61914-02DUP	DUP	04/13/07 14:34			.4	.41	mg/L				2.5	20	RA
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			
L61867-03AS	AS	04/16/07 12:11	WC070213-5	5	.4	5.82	mg/L	108.4	85	115			
L61867-03DUP	DUP	04/16/07 12:18			.4	.42	mg/L				4.9	20	RA
WG223129LFB2	LFB	04/16/07 13:25	WC070213-5	5		5.27	mg/L	105.4	90	110			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	II070403-5	2		1.966	mg/L	98.3	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.06	0.06			
WG223184LFB	LFB	04/16/07 18:05	II070328-2	1		1.012	mg/L	101.2	85	115			
L61914-01AS	AS	04/16/07 19:12	II070328-2	1	.29	1.335	mg/L	104.5	85	115			
L61914-01ASD	ASD	04/16/07 19:16	II070328-2	1	.29	1.343	mg/L	105.3	85	115	0.6	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	II070403-5	2		1.984	mg/L	99.2	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.06	0.06			
WG223189LFB	LFB	04/16/07 23:57	II070328-2	1		1.026	mg/L	102.6	85	115			
L61914-11AS	AS	04/17/07 0:05	II070328-2	1	.08	1.093	mg/L	101.3	85	115			
L61914-11ASD	ASD	04/17/07 0:09	II070328-2	1	.08	1.104	mg/L	102.4	85	115	1	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG222872													
WG222872ICV	ICV	04/09/07 22:03	MS070308-2	.05		.04968	mg/L	99.4	90	110			
WG222872ICB	ICB	04/09/07 22:09				U	mg/L		-0.0003	0.0003			
WG222872LFB	LFB	04/09/07 22:14	MS070227-3	.05		.04734	mg/L	94.7	85	115			
L61885-01AS	AS	04/09/07 22:26	MS070227-3	.05	U	.04715	mg/L	94.3	70	130			
L61885-01ASD	ASD	04/09/07 22:32	MS070227-3	.05	U	.04669	mg/L	93.4	70	130	0.98	20	
L61914-02AS	AS	04/09/07 23:47	MS070227-3	.05	U	.04543	mg/L	90.9	70	130			
L61914-02ASD	ASD	04/09/07 23:52	MS070227-3	.05	U	.04567	mg/L	91.3	70	130	0.53	20	

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Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	11070403-5	100		96.91	mg/L	96.9	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.6	0.6			
WG223184LFB	LFB	04/16/07 18:05	11070328-2	54.9596		53.45	mg/L	97.3	85	115			
L61914-01AS	AS	04/16/07 19:12	11070328-2	54.9596	43.8	103.79	mg/L	109.2	85	115			
L61914-01ASD	ASD	04/16/07 19:16	11070328-2	54.9596	43.8	101.02	mg/L	104.1	85	115	2.7	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	11070403-5	100		97.57	mg/L	97.6	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.6	0.6			
WG223189LFB	LFB	04/16/07 23:57	11070328-2	54.9596		55.83	mg/L	101.6	85	115			
L61914-11AS	AS	04/17/07 0:05	11070328-2	54.9596	48.6	102.87	mg/L	98.7	85	115			
L61914-11ASD	ASD	04/17/07 0:09	11070328-2	54.9596	48.6	104.7	mg/L	102.1	85	115	1.76	20	

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	11070403-5	2		1.954	mg/L	97.7	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.015	0.015			
WG223184LFB	LFB	04/16/07 18:05	11070328-2	.5		.5265	mg/L	105.3	85	115			
L61914-01AS	AS	04/16/07 19:12	11070328-2	.5	.026	.5598	mg/L	106.8	85	115			
L61914-01ASD	ASD	04/16/07 19:16	11070328-2	.5	.026	.5604	mg/L	106.9	85	115	0.11	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	11070403-5	2		1.9599	mg/L	98	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.015	0.015			
WG223189LFB	LFB	04/16/07 23:57	11070328-2	.5		.5294	mg/L	105.9	85	115			
L61914-11AS	AS	04/17/07 0:05	11070328-2	.5	.014	.5371	mg/L	104.6	85	115			
L61914-11ASD	ASD	04/17/07 0:09	11070328-2	.5	.014	.5458	mg/L	106.4	85	115	1.61	20	

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			
L61913-02LFM	LFM	04/12/07 17:11	11070402-4	.002	U	.00203	mg/L	101.5	85	115			
L61913-02LFMD	LFMD	04/12/07 17:14	11070402-4	.002	U	.00206	mg/L	103	85	115	1.47	20	
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	

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Molybdenum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	II070403-5	2		2.017	mg/L	100.9	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.03	0.03			
WG223184LFB	LFB	04/16/07 18:05	II070328-2	.5		.49	mg/L	98	85	115			
L61914-01AS	AS	04/16/07 19:12	II070328-2	.5	U	.555	mg/L	111	85	115			
L61914-01ASD	ASD	04/16/07 19:16	II070328-2	.5	U	.53	mg/L	106	85	115	4.61	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	II070403-5	2		2.015	mg/L	100.8	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.03	0.03			
WG223189LFB	LFB	04/16/07 23:57	II070328-2	.5		.512	mg/L	102.4	85	115			
L61914-11AS	AS	04/17/07 0:05	II070328-2	.5	U	.516	mg/L	103.2	85	115			
L61914-11ASD	ASD	04/17/07 0:09	II070328-2	.5	U	.522	mg/L	104.4	85	115	1.16	20	

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	II070403-5	2		1.94	mg/L	97	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.03	0.03			
WG223184LFB	LFB	04/16/07 18:05	II070328-2	.5		.482	mg/L	96.4	85	115			
L61914-01AS	AS	04/16/07 19:12	II070328-2	.5	U	.515	mg/L	103	85	115			
L61914-01ASD	ASD	04/16/07 19:16	II070328-2	.5	U	.515	mg/L	103	85	115	0	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	II070403-5	2		1.954	mg/L	97.7	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.03	0.03			
WG223189LFB	LFB	04/16/07 23:57	II070328-2	.5		.487	mg/L	97.4	85	115			
L61914-11AS	AS	04/17/07 0:05	II070328-2	.5	U	.487	mg/L	97.4	85	115			
L61914-11ASD	ASD	04/17/07 0:09	II070328-2	.5	U	.494	mg/L	98.8	85	115	1.43	20	

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			
L61914-02DUP	DUP	04/20/07 17:51			1.48	1.49	mg/L				0.7	20	
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	
L61914-01AS	AS	04/20/07 18:48	WI070307-9	4	1.89	6.008	mg/L	103	90	110			
L61914-11AS	AS	04/20/07 18:53	WI070307-9	20	6.9	27.33	mg/L	102.2	90	110			

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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			
L61914-02DUP	DUP	04/13/07 18:12			8.2	8.14	units				0.7	20	
L61927-01DUP	DUP	04/13/07 19:27			3.4	3.43	units				0.9	20	
WG223094LCSW6	LCSW	04/13/07 19:43	PCN25442	6		6.06	units	101	90	110			
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
WG223184													
WG223184ICV	ICV	04/16/07 17:44	II070403-5	20		20.21	mg/L	101.1	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.9	0.9			
WG223184LFB	LFB	04/16/07 18:05	II070328-2	99.61502		98.21	mg/L	98.6	85	115			
L61914-01AS	AS	04/16/07 19:12	II070328-2	99.61502	8.5	127.32	mg/L	119.3	85	115			MA
L61914-01ASD	ASD	04/16/07 19:16	II070328-2	99.61502	8.5	120.73	mg/L	112.7	85	115	5.31	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	II070403-5	20		20.12	mg/L	100.6	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.9	0.9			
WG223189LFB	LFB	04/16/07 23:57	II070328-2	99.61502		102.91	mg/L	103.3	85	115			
L61914-11AS	AS	04/17/07 0:05	II070328-2	99.61502	11.2	120.78	mg/L	110	85	115			
L61914-11ASD	ASD	04/17/07 0:09	II070328-2	99.61502	11.2	122.72	mg/L	112	85	115	1.59	20	

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG222897													
WG222897PBW	PBW	04/10/07 10:40				U	mg/L		-20	20			
WG222897LCSW	LCSW	04/10/07 10:41	PCN26765	261		294	mg/L	112.6	80	120			
L61914-03DUP	DUP	04/10/07 10:55			2600	2586	mg/L				0.5	20	
L61915-02DUP	DUP	04/10/07 11:09			180	176	mg/L				2.2	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG222872													
WG222872ICV	ICV	04/09/07 22:03	MS070308-2	.05		.05437	mg/L	108.7	90	110			
WG222872ICB	ICB	04/09/07 22:09				U	mg/L		-0.0003	0.0003			
WG222872LFB	LFB	04/09/07 22:14	MS070227-3	.05		.05065	mg/L	101.3	85	115			
L61885-01AS	AS	04/09/07 22:26	MS070227-3	.05	U	.05826	mg/L	116.5	70	130			
L61885-01ASD	ASD	04/09/07 22:32	MS070227-3	.05	U	.06265	mg/L	125.3	70	130	7.26	20	
L61914-02AS	AS	04/09/07 23:47	MS070227-3	.05	.0005	.05611	mg/L	111.2	70	130			
L61914-02ASD	ASD	04/09/07 23:52	MS070227-3	.05	.0005	.05662	mg/L	112.2	70	130	0.9	20	

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Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	II070403-5	100		99.98	mg/L	100	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.9	0.9			
WG223184LFB	LFB	04/16/07 18:05	II070328-2	99.92361		98.68	mg/L	98.8	85	115			
L61914-01AS	AS	04/16/07 19:12	II070328-2	99.92361	69.7	180.28	mg/L	110.7	85	115			
L61914-01ASD	ASD	04/16/07 19:16	II070328-2	99.92361	69.7	174.13	mg/L	104.5	85	115	3.47	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	II070403-5	100		99.68	mg/L	99.7	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.9	0.9			
WG223189LFB	LFB	04/16/07 23:57	II070328-2	99.92361		101.94	mg/L	102	85	115			
L61914-11AS	AS	04/17/07 0:05	II070328-2	99.92361	97.8	196.34	mg/L	98.6	85	115			
L61914-11ASD	ASD	04/17/07 0:09	II070328-2	99.92361	97.8	199.04	mg/L	101.3	85	115	1.37	20	

Sulfate SM4500 SO4-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG222961													
WG222961PBW	PBW	04/11/07 10:45				U	mg/L		-30	30			
WG222961LCSW	LCSW	04/11/07 10:47	WC061207-2	100		95	mg/L	95	80	120			
L61914-05DUP	DUP	04/11/07 11:15			1360	1339	mg/L				1.6	20	
L61934-03DUP	DUP	04/11/07 11:44			100	101	mg/L				1	20	
WG223339													
WG223339PBW	PBW	04/19/07 11:12				U	mg/L		-30	30			
WG223339LCSW	LCSW	04/19/07 11:15	WC061207-2	100		100	mg/L	100	80	120			
L62057-10DUP	DUP	04/19/07 11:56			30	33	mg/L				9.5	20	RA

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG222872													
WG222872ICV	ICV	04/09/07 22:03	MS070308-2	.056		.05491	mg/L	98.1	90	110			
WG222872ICB	ICB	04/09/07 22:09				U	mg/L		-0.0003	0.0003			
WG222872LFB	LFB	04/09/07 22:14	MS070227-3	.05		.049	mg/L	98	85	115			
L61885-01AS	AS	04/09/07 22:26	MS070227-3	.05	U	.04983	mg/L	99.7	70	130			
L61885-01ASD	ASD	04/09/07 22:32	MS070227-3	.05	U	.04926	mg/L	98.5	70	130	1.15	20	
L61914-02AS	AS	04/09/07 23:47	MS070227-3	.05	U	.0474	mg/L	94.8	70	130			
L61914-02ASD	ASD	04/09/07 23:52	MS070227-3	.05	U	.04787	mg/L	95.7	70	130	0.99	20	

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: **L61914**

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	GC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223184													
WG223184ICV	ICV	04/16/07 17:44	11070403-5	2		1.917	mg/L	95.9	95	105			
WG223184ICB	ICB	04/16/07 17:48				U	mg/L		-0.03	0.03			
WG223184LFB	LFB	04/16/07 18:05	11070328-2	.5		.478	mg/L	95.6	85	115			
L61914-01AS	AS	04/16/07 19:12	11070328-2	.5	.01	.555	mg/L	109	85	115			
L61914-01ASD	ASD	04/16/07 19:16	11070328-2	.5	.01	.527	mg/L	103.4	85	115	5.18	20	
WG223189													
WG223189ICV	ICV	04/16/07 23:36	11070403-5	2		1.922	mg/L	96.1	95	105			
WG223189ICB	ICB	04/16/07 23:40				U	mg/L		-0.03	0.03			
WG223189LFB	LFB	04/16/07 23:57	11070328-2	.5		.506	mg/L	101.2	85	115			
L61914-11AS	AS	04/17/07 0:05	11070328-2	.5	.7	1.154	mg/L	90.8	85	115			
L61914-11ASD	ASD	04/17/07 0:09	11070328-2	.5	.7	1.175	mg/L	95	85	115	1.8	20	

helps Dodge Sierrita

ACZ Project ID: L61914

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L61914-01	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
L61914-02	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
L61914-03	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
	WG223094	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61914-04	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
	WG223094	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61914-05	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
	WG223094	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61914-06	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
	WG223094	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61914-07	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
	WG223094	Total Alkalinity	SM2320B - Titration	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: **L61914**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L61914-08	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG223051	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).
	WG223094	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61914-09	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	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).
	WG223339	Sulfate	SM4500 SO4-D	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223094	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61914-10	WG223184	Potassium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	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).
	WG223094	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L61914-11	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).
	WG223094	Total Alkalinity	SM2320B - Titration	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: **L61914**

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: L61914
Date Received: 4/9/2007
Received By:
Date Printed: 4/9/2007

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

The requested analyses were not present. The following items were not in agreement: sampleid. The requested analysis was not present on the COC or attached paperwork. Per the bottle types received the project was entered for the "AMBIENT" quote. The green container for sample #8 was labeled as "MH-25A" but was in the bag with the "25B" samples. The time matched with the "25B" samples and the container was entered into the system according to the COC.

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

The client was not contacted.

Shipping Containers

Cooler Id		Temp (°C)	Rad (µR/hr)
1194		12.3	17

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: L61914
Date Received: 4/9/2007
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
L61914-01	IW-1		Y		Y							<input type="checkbox"/>
L61914-02	IW-2		Y		Y							<input type="checkbox"/>
L61914-03	IW-3A		Y		Y							<input type="checkbox"/>
L61914-04	IW-8		Y		Y							<input type="checkbox"/>
L61914-05	MH-10		Y		Y							<input type="checkbox"/>
L61914-06	MW-12		Y		Y							<input type="checkbox"/>
L61914-07	MH-25A		Y		Y							<input type="checkbox"/>
L61914-08	MH-25B		Y		Y							<input type="checkbox"/>
L61914-09	MH-26A		Y		Y							<input type="checkbox"/>
L61914-10	MH-26B		Y		Y							<input type="checkbox"/>
L61914-11	MH-26C		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
	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.

L61914

CHAIN of CUSTODY

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

Report to:

Name: <i>Bill Dorris</i>	Address: <i>6200 West Duval Mine Rd</i>
Company: <i>Phelps Dodge Sierrita</i>	<i>Green Valley Az 85614</i>
E-mail: <i>Billy-Dorris@FMI.com</i>	Telephone: <i>520 648 8873</i>

Copy of Report to:

Name: <i>Jim Norris</i>	E-mail: <i>jimn@hgcinc.com</i>
Company: <i>Hydro Geo Chem</i>	Telephone: <i>520-293-1500 EXT 112</i>

Invoice to:

Name:	Address:
Company:	
E-mail:	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 #:	Reporting state for compliance testing:	Sampler's Name:	Are any samples NRC licensable material?	Matrix	# of Containers									
	<i>OJ03DL</i>														
<i>IW-1</i>	<i>4-3-07 / 8:25</i>	<i>GW</i>	<i>9</i>												
<i>IW-2</i>	<i>4-3-07 / 8:35</i>	<i>GW</i>	<i>9</i>												
<i>IW-3A</i>	<i>4-3-07 / 8:45</i>	<i>GW</i>	<i>9</i>												
<i>IW-8</i>	<i>4-3-07 / 9:00</i>	<i>GW</i>	<i>9</i>												
<i>MH-10</i>	<i>4-3-07 / 12:20</i>	<i>GW</i>	<i>9</i>												
<i>MH-12</i>	<i>4-4-07 / 13:45</i>	<i>GW</i>	<i>9</i>												
<i>MH-25A</i>	<i>4-4-07 / 12:40</i>	<i>GW</i>	<i>9</i>												
<i>MH-25B</i>	<i>4-4-07 / 13:24</i>	<i>GW</i>	<i>9</i>												
<i>MH-26A</i>	<i>4-4-07 / 10:09</i>	<i>GW</i>	<i>9</i>												
<i>MH-26B</i>	<i>4-4-07 / 11:56</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

MH-26C 4-4-07 / 9:43 GW 9

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>4-5-07 / 14:00</i>	<i>[Signature]</i>	<i>4-9-07 11:25</i>

May 01, 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: L62112 - SHORT

Bill Dorris:

Enclosed are revised analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 19, 2007 and reported on May 01, 2007. This project was assigned to ACZ's project number, L62112. 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 L62112. 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.

01/May/07

Scott Habermehl, Project Manager, has reviewed and approved this report in its entirety.



Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: IW-9

ACZ Sample ID: **L62112-01**

Date Sampled: 04/17/07 09:20

Date Received: 04/19/07

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	496			mg/L	0.4	2	04/25/07 13:10	djt
Magnesium, dissolved	M200.7 ICP	101			mg/L	0.4	2	04/25/07 13:10	djt
Potassium, dissolved	M200.7 ICP	12.6			mg/L	0.6	3	04/26/07 18:28	wfg
Sodium, dissolved	M200.7 ICP	189			mg/L	0.6	3	04/26/07 18:28	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		120			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		120			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-1.3			%			05/01/07 0:00	calc
Sum of Anions		42.8			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		41.7			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	130		*	mg/L	10	50	04/24/07 14:25	jag
Fluoride	SM4500F-C	0.3	B	*	mg/L	0.1	0.5	04/27/07 11:38	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.89			mg/L	0.02	0.1	04/26/07 18:41	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2980	H	*	mg/L	10	20	04/25/07 14:25	aeh
Sulfate	SM4500 SO4-D	1750			mg/L	10	50	04/20/07 15:06	seb
TDS (calculated)	Calculation	2750			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.08						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-12

ACZ Sample ID: **L62112-02**
 Date Sampled: 04/17/07 09:55
 Date Received: 04/19/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	455			mg/L	0.4	2	04/25/07 13:14	djt
Magnesium, dissolved	M200.7 ICP	94.9			mg/L	0.4	2	04/25/07 13:14	djt
Potassium, dissolved	M200.7 ICP	6.7			mg/L	0.6	3	04/26/07 18:41	wfg
Sodium, dissolved	M200.7 ICP	169			mg/L	0.6	3	04/26/07 18:41	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		112			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		112			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-1.9			%			05/01/07 0:00	calc
Sum of Anions		39.6			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		38.1			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	110		*	mg/L	10	50	04/24/07 14:25	jag
Fluoride	SM4500F-C	0.3	B	*	mg/L	0.1	0.5	04/27/07 11:45	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.16			mg/L	0.02	0.1	04/26/07 18:42	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2750	H	*	mg/L	10	20	04/25/07 14:28	aeh
Sulfate	SM4500 SO4-D	1630			mg/L	10	50	04/20/07 15:09	seb
TDS (calculated)	Calculation	2530			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.09						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: IW-15

ACZ Sample ID: **L62112-03**
 Date Sampled: 04/17/07 13:10
 Date Received: 04/19/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	526			mg/L	0.4	2	04/25/07 13:17	djt
Magnesium, dissolved	M200.7 ICP	104			mg/L	0.4	2	04/25/07 13:17	djt
Potassium, dissolved	M200.7 ICP	6.8			mg/L	0.6	3	04/26/07 18:45	wfg
Sodium, dissolved	M200.7 ICP	127			mg/L	0.6	3	04/26/07 18:45	wfg

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	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		126			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-2.5			%			05/01/07 0:00	calc
Sum of Anions		42.7			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		40.6			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	130		*	mg/L	10	50	04/24/07 14:25	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/27/07 12:01	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.93			mg/L	0.02	0.1	04/26/07 18:43	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2920	H	*	mg/L	10	20	04/25/07 14:30	aeh
Sulfate	SM4500 SO4-D	1740			mg/L	10	50	04/20/07 15:12	seb
TDS (calculated)	Calculation	2710			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.08						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
Sample ID: IW-20

ACZ Sample ID: **L62112-04**
Date Sampled: 04/17/07 12:55
Date Received: 04/19/07
Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	452			mg/L	0.4	2	04/25/07 13:20	djt
Magnesium, dissolved	M200.7 ICP	117			mg/L	0.4	2	04/25/07 13:20	djt
Potassium, dissolved	M200.7 ICP	6.8			mg/L	0.6	3	04/26/07 18:49	wfg
Sodium, dissolved	M200.7 ICP	123			mg/L	0.6	3	04/26/07 18:49	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		136			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		136			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-0.1			%			05/01/07 0:00	calc
Sum of Anions		37.9			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		37.8			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	130		*	mg/L	10	50	04/24/07 14:25	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/27/07 12:08	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.42			mg/L	0.02	0.1	04/26/07 18:45	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2730	H	*	mg/L	10	20	04/25/07 14:34	aeH
Sulfate	SM4500 SO4-D	1500			mg/L	10	50	04/20/07 15:16	seb
TDS (calculated)	Calculation	2410			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.13						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: MH-28

ACZ Sample ID: **L62112-05**

Date Sampled: 04/17/07 13:35

Date Received: 04/19/07

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	589			mg/L	0.4	2	04/25/07 13:29	djt
Magnesium, dissolved	M200.7 ICP	92.8			mg/L	0.4	2	04/25/07 13:29	djt
Potassium, dissolved	M200.7 ICP	6.7			mg/L	0.6	3	04/26/07 18:54	wfg
Sodium, dissolved	M200.7 ICP	154			mg/L	0.6	3	04/26/07 18:54	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		128			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		128			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-2.8			%			05/01/07 0:00	calc
Sum of Anions		46.5			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		44.0			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	130		*	mg/L	10	50	04/24/07 14:31	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/27/07 12:15	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.49			mg/L	0.02	0.1	04/26/07 18:46	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	3220	H	*	mg/L	10	20	04/25/07 14:36	aeH
Sulfate	SM4500 SO4-D	1920			mg/L	10	50	04/20/07 15:19	seb
TDS (calculated)	Calculation	2970			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.08						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: MH-29

ACZ Sample ID: **L62112-06**
 Date Sampled: 04/17/07 09:43
 Date Received: 04/19/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	519			mg/L	0.4	2	04/25/07 13:32	djt
Magnesium, dissolved	M200.7 ICP	95.6			mg/L	0.4	2	04/25/07 13:32	djt
Potassium, dissolved	M200.7 ICP	9.9			mg/L	0.6	3	04/26/07 18:58	wfg
Sodium, dissolved	M200.7 ICP	151			mg/L	0.6	3	04/26/07 18:58	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		160			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		160			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-2.6			%			05/01/07 0:00	calc
Sum of Anions		42.9			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		40.7			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	150		*	mg/L	10	50	04/24/07 14:32	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/27/07 12:22	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.67		*	mg/L	0.02	0.1	04/26/07 19:56	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2910	H	*	mg/L	10	20	04/25/07 14:38	aeh
Sulfate	SM4500 SO4-D	1690			mg/L	10	50	04/20/07 15:22	seb
TDS (calculated)	Calculation	2710			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.07						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: PZ-8

ACZ Sample ID: **L62112-07**

Date Sampled: 04/17/07 08:32

Date Received: 04/19/07

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	151		*	mg/L	0.2	1	04/25/07 13:35	djt
Magnesium, dissolved	M200.7 ICP	47.9			mg/L	0.2	1	04/25/07 13:35	djt
Potassium, dissolved	M200.7 ICP	8.1			mg/L	0.3	2	04/26/07 19:02	wfg
Sodium, dissolved	M200.7 ICP	107			mg/L	0.3	2	04/26/07 19:02	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		167			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		167			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-0.3			%			05/01/07 0:00	calc
Sum of Anions		16.5			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		16.4			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	62		*	mg/L	1	5	04/24/07 14:18	jag
Fluoride	SM4500F-C	0.8		*	mg/L	0.1	0.5	04/27/07 12:29	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.35		*	mg/L	0.02	0.1	04/26/07 19:57	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	1080	H	*	mg/L	10	20	04/25/07 14:41	aeh
Sulfate	SM4500 SO4-D	540			mg/L	10	50	04/20/07 15:25	seb
TDS (calculated)	Calculation	1020			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.06						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: MH-13A

ACZ Sample ID: **L62112-08**
 Date Sampled: 04/18/07 11:27
 Date Received: 04/19/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XG	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	484		*	mg/L	0.4	2	04/25/07 13:45	djt
Magnesium, dissolved	M200.7 ICP	97.2			mg/L	0.4	2	04/25/07 13:45	djt
Potassium, dissolved	M200.7 ICP	13.9			mg/L	0.6	3	04/26/07 19:06	wfg
Sodium, dissolved	M200.7 ICP	171			mg/L	0.6	3	04/26/07 19:06	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XG	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration	111			mg/L	2	20	04/26/07 0:00	cas
Bicarbonate as CaCO3				U	mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3				U	mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3					mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		111			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation				%			05/01/07 0:00	calc
Cation-Anion Balance		-4.0			%			05/01/07 0:00	calc
Sum of Anions		43.4			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		40.1			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	180		*	mg/L	10	50	04/24/07 14:32	jag
Fluoride	SM4500F-C	0.1		B	mg/L	0.1	0.5	04/27/07 12:39	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.19		*	mg/L	0.02	0.1	04/26/07 20:02	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2960		*	mg/L	10	20	04/25/07 14:43	aeh
Sulfate	SM4500 SO4-D	1720			mg/L	10	50	04/20/07 15:32	seb
TDS (calculated)	Calculation	2730			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.08						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: MH-13B

ACZ Sample ID: **L62112-09**
 Date Sampled: 04/18/07 12:23
 Date Received: 04/19/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	374		*	mg/L	0.4	2	04/25/07 13:48	djt
Magnesium, dissolved	M200.7 ICP	54.5			mg/L	0.4	2	04/25/07 13:48	djt
Potassium, dissolved	M200.7 ICP	10.8			mg/L	0.6	3	04/26/07 19:19	wfg
Sodium, dissolved	M200.7 ICP	126			mg/L	0.6	3	04/26/07 19:19	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		92			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		92			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		-1.5			%			05/01/07 0:00	calc
Sum of Anions		29.9			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		29.0			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	160		*	mg/L	10	50	04/24/07 14:32	jag
Fluoride	SM4500F-C	0.2	B	*	mg/L	0.1	0.5	04/27/07 12:56	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1.49		*	mg/L	0.02	0.1	04/26/07 20:03	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2060		*	mg/L	10	20	04/25/07 14:45	aeh
Sulfate	SM4500 SO4-D	1120			mg/L	10	50	04/20/07 15:35	seb
TDS (calculated)	Calculation	1900			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.08						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: MH-13C

ACZ Sample ID: **L62112-10**
 Date Sampled: 04/18/07 10:47
 Date Received: 04/19/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XG	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5.6		*	mg/L	0.2	1	04/25/07 13:51	djt
Magnesium, dissolved	M200.7 ICP	0.6	B		mg/L	0.2	1	04/25/07 13:51	djt
Potassium, dissolved	M200.7 ICP	2.3			mg/L	0.3	2	04/26/07 19:31	wfg
Sodium, dissolved	M200.7 ICP	68.8			mg/L	0.3	2	04/26/07 19:31	wfg

Wet Chemistry

Parameter	EPA Method	Result	Qual	XG	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		102			mg/L	2	20	04/26/07 0:00	cas
Carbonate as CaCO3		28			mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		130			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		3.0			%			05/01/07 0:00	calc
Sum of Anions		3.2			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		3.4			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	8		*	mg/L	1	5	04/24/07 14:19	jag
Fluoride	SM4500F-C	0.7		*	mg/L	0.1	0.5	04/27/07 13:03	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.06	B	*	mg/L	0.02	0.1	04/26/07 20:05	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	200		*	mg/L	10	20	04/25/07 14:47	aeh
Sulfate	SM4500 SO4-D	20	B		mg/L	10	50	04/20/07 15:39	seb
TDS (calculated)	Calculation	195			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	1.03						05/01/07 0:00	calc

Arizona license number: AZ0102

Phelps Dodge Sierrita

Project ID: OJ03DL
 Sample ID: DUP041807A

ACZ Sample ID: **L62112-11**
 Date Sampled: 04/18/07 00:00
 Date Received: 04/19/07
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	6.1			mg/L	0.2	1	04/25/07 14:49	msh
Magnesium, dissolved	M200.7 ICP	0.7	B		mg/L	0.2	1	04/25/07 14:49	msh
Potassium, dissolved	M200.7 ICP	2.5			mg/L	0.3	2	04/25/07 14:49	msh
Sodium, dissolved	M200.7 ICP	70.0			mg/L	0.3	2	04/25/07 14:49	msh

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	04/26/07 0:00	cas
Carbonate as CaCO3		25			mg/L	2	20	04/26/07 0:00	cas
Hydroxide as CaCO3			U		mg/L	2	20	04/26/07 0:00	cas
Total Alkalinity		129			mg/L	2	20	04/26/07 0:00	cas
Cation-Anion Balance	Calculation								
Cation-Anion Balance		4.5			%			05/01/07 0:00	calc
Sum of Anions		3.2			meq/L	0.1	0.5	05/01/07 0:00	calc
Sum of Cations		3.5			meq/L	0.1	0.5	05/01/07 0:00	calc
Chloride	M325.2 - Colorimetric	8		*	mg/L	1	5	04/24/07 14:19	jag
Fluoride	SM4500F-C	0.7		*	mg/L	0.1	0.5	04/27/07 13:24	cas
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.10			mg/L	0.02	0.1	04/26/07 20:06	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	190		*	mg/L	10	20	04/25/07 14:49	aeh
Sulfate	SM4500 SO4-D	20	B		mg/L	10	50	04/20/07 15:42	seb
TDS (calculated)	Calculation	195			mg/L	10	50	05/01/07 0:00	calc
TDS (ratio - measured/calculated)	Calculation	0.97						05/01/07 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
 Project ID: OJ03DL

ACZ Project ID: L62112

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223712													
WG223712LCSW2	LCSW	04/26/07 17:57	WC070421-1	820		812.6	mg/L	99.1	80	120			
L62112-03DUP	DUP	04/26/07 19:40			126	126	mg/L				0	20	
L62115-02DUP	DUP	04/26/07 21:06			60	59.1	mg/L				1.5	20	
WG223712LCSW5	LCSW	04/26/07 21:20	WC070421-1	820		812.2	mg/L	99	80	120			
WG223712LCSW8	LCSW	04/27/07 0:26	WC070421-1	820		825.8	mg/L	100.7	80	120			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		2.011	mg/L	100.6	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.09	0.09			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	1		1.095	mg/L	109.5	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	1	.04	1.035	mg/L	99.5	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	1	.04	1.086	mg/L	104.6	85	115	4.81	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.939	mg/L	97	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.09	0.09			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	1		1.104	mg/L	110.4	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	1	.09	1.36	mg/L	127	85	115			M1
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	1	.09	1.385	mg/L	129.5	85	115	1.82	20	M1

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223374													
WG223374ICV	ICV	04/20/07 1:55	MS070308-2	.02		.01957	mg/L	97.9	90	110			
WG223374ICB	ICB	04/20/07 2:00				U	mg/L		-0.0012	0.0012			
WG223374LFB	LFB	04/20/07 2:06	MS070227-3	.00625		.00667	mg/L	106.7	85	115			
L62112-02AS	AS	04/20/07 3:36	MS070227-3	.00625	U	.00624	mg/L	99.8	70	130			
L62112-02ASD	ASD	04/20/07 3:41	MS070227-3	.00625	U	.00637	mg/L	101.9	70	130	2.06	20	
WG223533													
WG223533ICV	ICV	04/23/07 23:42	MS070308-2	.02		.01916	mg/L	95.8	90	110			
WG223533ICB	ICB	04/23/07 23:48				U	mg/L		-0.0012	0.0012			
WG223533LFB	LFB	04/23/07 23:53	MS070227-3	.00625		.0066	mg/L	105.6	85	115			
L62079-08AS	AS	04/24/07 0:05	MS070227-3	.0625	U	.0658	mg/L	105.3	70	130			
L62079-08ASD	ASD	04/24/07 0:11	MS070227-3	.0625	U	.067	mg/L	107.2	70	130	1.81	20	

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62112

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223374													
WG223374ICV	ICV	04/20/07 1:55	MS070308-2	.05		.05229	mg/L	104.6	90	110			
WG223374ICB	ICB	04/20/07 2:00				U	mg/L		-0.0015	0.0015			
WG223374LFB	LFB	04/20/07 2:06	MS070227-3	.05		.0517	mg/L	103.4	85	115			
L62112-02AS	AS	04/20/07 3:36	MS070227-3	.05	.0042	.07333	mg/L	138.3	70	130			M1
L62112-02ASD	ASD	04/20/07 3:41	MS070227-3	.05	.0042	.0744	mg/L	140.4	70	130	1.45	20	M1
WG223533													
WG223533ICV	ICV	04/23/07 23:42	MS070308-2	.05		.05222	mg/L	104.4	90	110			
WG223533ICB	ICB	04/23/07 23:48				U	mg/L		-0.0015	0.0015			
WG223533LFB	LFB	04/23/07 23:53	MS070227-3	.05		.05226	mg/L	104.5	85	115			
L62079-08AS	AS	04/24/07 0:05	MS070227-3	.5	U	.5177	mg/L	103.5	70	130			
L62079-08ASD	ASD	04/24/07 0:11	MS070227-3	.5	U	.5248	mg/L	105	70	130	1.36	20	

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.9906	mg/L	99.5	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.009	0.009			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	.5		.489	mg/L	97.8	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	.5	.027	.4709	mg/L	88.8	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	.5	.027	.4868	mg/L	92	85	115	3.32	20	
WG223749													
WG223749ICV	ICV	04/26/07 19:05	II070410-4	2		2.0253	mg/L	101.3	95	105			
WG223749ICB	ICB	04/26/07 19:09				U	mg/L		-0.009	0.009			
WG223749LFB	LFB	04/26/07 19:26	II070425-2	.5		.5039	mg/L	100.8	85	115			
L62038-01AS	AS	04/26/07 19:34	II070425-2	.5	.031	.5238	mg/L	98.6	85	115			
L62038-01ASD	ASD	04/26/07 19:38	II070425-2	.5	.031	.5234	mg/L	98.5	85	115	0.08	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223374													
WG223374ICV	ICV	04/20/07 1:55	MS070308-2	.05		.04942	mg/L	98.8	90	110			
WG223374ICB	ICB	04/20/07 2:00				U	mg/L		-0.0003	0.0003			
WG223374LFB	LFB	04/20/07 2:06	MS070227-3	.05		.04908	mg/L	98.2	85	115			
L62112-02AS	AS	04/20/07 3:36	MS070227-3	.05	U	.04497	mg/L	89.9	70	130			
L62112-02ASD	ASD	04/20/07 3:41	MS070227-3	.05	U	.04681	mg/L	93.6	70	130	4.01	20	
WG223533													
WG223533ICV	ICV	04/23/07 23:42	MS070308-2	.05		.05057	mg/L	101.1	90	110			
WG223533ICB	ICB	04/23/07 23:48				U	mg/L		-0.0003	0.0003			
WG223533LFB	LFB	04/23/07 23:53	MS070227-3	.05		.05037	mg/L	100.7	85	115			
L62079-08AS	AS	04/24/07 0:05	MS070227-3	.5	U	.5021	mg/L	100.4	70	130			
L62079-08ASD	ASD	04/24/07 0:11	MS070227-3	.5	U	.502	mg/L	100.4	70	130	0.02	20	

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: **L62112**

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223374													
WG223374ICV	ICV	04/20/07 1:55	MS070308-2	.05		.05184	mg/L	103.7	90	110			
WG223374ICB	ICB	04/20/07 2:00				U	mg/L		-0.0003	0.0003			
WG223374LFB	LFB	04/20/07 2:06	MS070227-3	.05		.05105	mg/L	102.1	85	115			
L62112-02AS	AS	04/20/07 3:36	MS070227-3	.05	U	.04934	mg/L	98.7	70	130			
L62112-02ASD	ASD	04/20/07 3:41	MS070227-3	.05	U	.05007	mg/L	100.1	70	130	1.47	20	
WG223533													
WG223533ICV	ICV	04/23/07 23:42	MS070308-2	.05		.05317	mg/L	106.3	90	110			
WG223533ICB	ICB	04/23/07 23:48				U	mg/L		-0.0003	0.0003			
WG223533LFB	LFB	04/23/07 23:53	MS070227-3	.05		.05141	mg/L	102.8	85	115			
L62079-08AS	AS	04/24/07 0:05	MS070227-3	.5	U	.5091	mg/L	101.8	70	130			
L62079-08ASD	ASD	04/24/07 0:11	MS070227-3	.5	U	.5067	mg/L	101.3	70	130	0.47	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	I1070419-1	100		97.5	mg/L	97.5	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.6	0.6			
WG223592LFB	LFB	04/25/07 12:24	I1070418-2	67.97554		70.51	mg/L	103.7	85	115			
L62112-07AS	AS	04/25/07 13:39	I1070418-2	67.97554	151	201.75	mg/L	74.7	85	115			M2
L62112-07ASD	ASD	04/25/07 13:42	I1070418-2	67.97554	151	207.68	mg/L	83.4	85	115	2.9	20	M2
WG223595													
WG223595ICV	ICV	04/25/07 14:17	I1070419-1	100		99.43	mg/L	99.4	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.6	0.6			
WG223595LFB	LFB	04/25/07 14:33	I1070418-2	67.97554		72.18	mg/L	106.2	85	115			
L62113-01AS	AS	04/25/07 15:02	I1070418-2	67.97554	24.5	98.57	mg/L	109	85	115			
L62113-01ASD	ASD	04/25/07 15:05	I1070418-2	67.97554	24.5	97.31	mg/L	107.1	85	115	1.29	20	

Chloride M325.2 - Colorimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223597													
WG223597ICB	ICB	04/24/07 8:28				U	mg/L		-3	3			
WG223597ICV	ICV	04/24/07 8:28	WI070314-1	55		56.4	mg/L	102.5	90	110			
WG223597LFB1	LFB	04/24/07 13:25	WI070205-1	30		31	mg/L	103.3	90	110			
WG223597LFB2	LFB	04/24/07 13:52	WI070205-1	30		30.8	mg/L	102.7	90	110			
L62085-04AS	AS	04/24/07 14:03	20XCL	30	770	776	mg/L	20	90	110			M3
L62085-05DUP	DUP	04/24/07 14:04			2400	2430	mg/L				1.2	20	
L62094-05AS	AS	04/24/07 14:11	WI070205-1	30	65	91.3	mg/L	87.7	90	110			M2
L62094-06DUP	DUP	04/24/07 14:11			10	9.7	mg/L				3	20	
L62112-03AS	AS	04/24/07 14:25	10XCL	30	130	164	mg/L	113.3	90	110			M3
L62112-04DUP	DUP	04/24/07 14:31			130	128	mg/L				1.6	20	
WG223597LFB3	LFB	04/24/07 14:34	WI070205-1	30		30.9	mg/L	103	90	110			

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62112

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.894	mg/L	94.7	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.03	0.03			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	.5		.471	mg/L	94.2	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	.5	U	.441	mg/L	88.2	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	.5	U	.45	mg/L	90	85	115	2.02	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.937	mg/L	96.9	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.03	0.03			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	.5		.484	mg/L	96.8	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	.5	U	.51	mg/L	102	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	.5	U	.506	mg/L	101.2	85	115	0.79	20	
WG223742													
WG223742ICV	ICV	04/26/07 17:42	II070419-1	2		1.957	mg/L	97.9	95	105			
WG223742ICB	ICB	04/26/07 17:47				U	mg/L		-0.03	0.03			
WG223742LFB	LFB	04/26/07 18:03	II070425-2	.5		.503	mg/L	100.6	85	115			
L62111-06AS	AS	04/26/07 18:16	II070425-2	.5	U	.504	mg/L	100.8	85	115			
L62111-06ASD	ASD	04/26/07 18:20	II070425-2	.5	U	.517	mg/L	103.4	85	115	2.55	20	
L62112-08AS	AS	04/26/07 19:10	II070425-2	1	U	1.015	mg/L	101.5	85	115			
L62112-08ASD	ASD	04/26/07 19:15	II070425-2	1	U	1.023	mg/L	102.3	85	115	0.79	20	

Cobalt, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.9	mg/L	95	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.03	0.03			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	.5		.483	mg/L	96.6	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	.5	U	.45	mg/L	90	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	.5	U	.454	mg/L	90.8	85	115	0.88	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.92	mg/L	96	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.03	0.03			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	.5		.494	mg/L	98.8	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	.5	U	.513	mg/L	102.6	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	.5	U	.51	mg/L	102	85	115	0.59	20	

Conductivity @25C M120.1 - Meter

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223712													
WG223712PBW1	PBW	04/26/07 17:44				U	µmhos/cm		-10	10			
WG223712LCSW1	LCSW	04/26/07 17:46	PCN26896	1408.8		1429	µmhos/cm	101.4	80	120			
L62112-03DUP	DUP	04/26/07 19:40			3160	3120	µmhos/cm				1.3	20	
L62115-02DUP	DUP	04/26/07 21:06			149	149.4	µmhos/cm				0.3	20	
WG223712PBW2	PBW	04/26/07 21:07				U	µmhos/cm		-10	10			
WG223712LCSW4	LCSW	04/26/07 21:09	PCN26896	1408.8		1435	µmhos/cm	101.9	80	120			
WG223712LCSW7	LCSW	04/27/07 0:15	PCN26896	1408.8		1430	µmhos/cm	101.5	80	120			

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62112

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.923	mg/L	96.2	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.03	0.03			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	.5		.488	mg/L	97.6	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	.5	U	.454	mg/L	90.8	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	.5	U	.472	mg/L	94.4	85	115	3.89	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.937	mg/L	96.9	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.03	0.03			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	.5		.492	mg/L	98.4	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	.5	U	.516	mg/L	103.2	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	.5	U	.518	mg/L	103.6	85	115	0.39	20	

Cyanide, total M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223730													
WG223730ICV	ICV	04/26/07 12:46	WI070412-6	.3		.2945	mg/L	98.2	90	110			
WG223730ICB	ICB	04/26/07 12:46				U	mg/L		-0.015	0.015			
WG223656LRB1	LRB	04/26/07 13:01				U	mg/L		-0.015	0.015			
WG223656LFB1	LFB	04/26/07 13:01	WI070412-2	.2		.1953	mg/L	97.7	90	110			
L62079-09DUP	DUP	04/26/07 13:01			U	U	mg/L				0	20	RA
L62098-01LFM	LFM	04/26/07 13:01	WI070412-2	.2	.106	.3231	mg/L	108.6	90	110			
L62112-05DUP	DUP	04/26/07 13:07			.078	.0702	mg/L				10.5	20	
L62112-06LFM	LFM	04/26/07 13:07	WI070412-2	.2	U	.2038	mg/L	101.9	90	110			
WG223656LRB2	LRB	04/26/07 13:18				U	mg/L		-0.015	0.015			
WG223656LFB2	LFB	04/26/07 13:22	WI070412-2	.2		.1892	mg/L	94.6	90	110			

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223723													
WG223723ICV	ICV	04/27/07 9:09	WC070423-1	1.992		2.05	mg/L	102.9	95	105			
WG223723ICB	ICB	04/27/07 9:15				U	mg/L		-0.3	0.3			
WG223723LFB1	LFB	04/27/07 9:27	WC070213-5	5		4.81	mg/L	96.2	90	110			
L62112-01AS	AS	04/27/07 11:39	WC070213-5	5	.3	4.16	mg/L	77.2	85	115			M2
L62112-01DUP	DUP	04/27/07 11:40			.3	.29	mg/L				3.4	20	RA
WG223723LFB2	LFB	04/27/07 12:31	WC070213-5	5		4.65	mg/L	93	90	110			
L62112-10AS	AS	04/27/07 13:10	WC070213-5	5	.7	5.38	mg/L	93.6	85	115			
L62112-10DUP	DUP	04/27/07 13:17			.7	.65	mg/L				7.4	20	RA

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62112

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.965	mg/L	98.3	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.06	0.06			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	1		1.042	mg/L	104.2	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	1	U	.943	mg/L	94.3	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	1	U	.972	mg/L	97.2	85	115	3.03	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.983	mg/L	99.2	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.06	0.06			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	1		1.057	mg/L	105.7	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	1	.08	1.202	mg/L	112.2	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	1	.08	1.194	mg/L	111.4	85	115	0.67	20	

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223374													
WG223374ICV	ICV	04/20/07 1:55	MS070308-2	.05		.0546	mg/L	109.2	90	110			
WG223374ICB	ICB	04/20/07 2:00				U	mg/L		-0.0003	0.0003			
WG223374LFB	LFB	04/20/07 2:06	MS070227-3	.05		.0519	mg/L	103.8	85	115			
L62112-02AS	AS	04/20/07 3:36	MS070227-3	.05	.0008	.0477	mg/L	93.8	70	130			
L62112-02ASD	ASD	04/20/07 3:41	MS070227-3	.05	.0008	.04837	mg/L	95.1	70	130	1.39	20	
WG223620													
WG223620ICV	ICV	04/25/07 4:01	MS070308-2	.05		.05509	mg/L	110.2	90	110			
WG223620ICB	ICB	04/25/07 4:07				U	mg/L		-0.0003	0.0003			
WG223620LFB	LFB	04/25/07 4:12	MS070227-3	.05		.05198	mg/L	104	85	115			
L62131-01AS	AS	04/25/07 4:52	MS070227-3	.1	.0003	.10192	mg/L	101.6	70	130			
L62131-01ASD	ASD	04/25/07 4:57	MS070227-3	.1	.0003	.10242	mg/L	102.1	70	130	0.49	20	

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	100		97.81	mg/L	97.8	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.6	0.6			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	54.9596		57.43	mg/L	104.5	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	54.9596	47.9	97.47	mg/L	90.2	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	54.9596	47.9	101.84	mg/L	98.1	85	115	4.39	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	100		97.02	mg/L	97	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.6	0.6			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	54.9596		57.16	mg/L	104	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	54.9596	2.5	62.28	mg/L	108.8	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	54.9596	2.5	61.54	mg/L	107.4	85	115	1.2	20	

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62112

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/ISON	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.8998	mg/L	95	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.015	0.015			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	.5		.5199	mg/L	104	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	.5	.015	.4863	mg/L	94.3	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	.5	.015	.4972	mg/L	96.4	85	115	2.22	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.9456	mg/L	97.3	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.015	0.015			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	.5		.5303	mg/L	106.1	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	.5	U	.5433	mg/L	108.7	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	.5	U	.5404	mg/L	108.1	85	115	0.54	20	

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/ISON	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223415													
WG223415ICV	ICV	04/21/07 18:51	II070406-1	.00498		.00519	mg/L	104.2	90	110			
WG223415ICB	ICB	04/21/07 18:53				U	mg/L		-0.0006	0.0006			
WG223412													
G223412LRB	LRB	04/21/07 19:27				U	mg/L		-0.00044	0.00044			
L62112-01LFM	LFM	04/21/07 19:34	II070411-6	.002	U	.00181	mg/L	90.5	85	115			
L62112-01LFMD	LFMD	04/21/07 19:36	II070411-6	.002	U	.0018	mg/L	90	85	115	0.55	20	
L62112-11LFM	LFM	04/21/07 20:05	II070411-6	.002	U	.00173	mg/L	86.5	85	115			
L62112-11LFMD	LFMD	04/21/07 20:07	II070411-6	.002	U	.00185	mg/L	92.5	85	115	6.7	20	
WG223412ICV	ICV	04/24/07 9:32	II070406-1	.00498		.0052	mg/L	104.4	95	105			
WG223412ICB	ICB	04/24/07 9:34				U	mg/L		-0.0002	0.0002			
WG223412LFB	LFB	04/24/07 9:36	II070411-6	.002		.00191	mg/L	95.5	85	115			

Molybdenum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/ISON	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.942	mg/L	97.1	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.03	0.03			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	.5		.527	mg/L	105.4	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	.5	.11	.535	mg/L	85	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	.5	.11	.567	mg/L	91.4	85	115	5.81	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.988	mg/L	99.4	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.03	0.03			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	.5		.524	mg/L	104.8	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	.5	U	.543	mg/L	108.6	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	.5	U	.537	mg/L	107.4	85	115	1.11	20	

Phelps Dodge Sierrita
Project ID: OJ03DL

ACZ Project ID: L62112

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.926	mg/L	96.3	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.03	0.03			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	.5		.491	mg/L	98.2	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	.5	U	.51	mg/L	102	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	.5	U	.512	mg/L	102.4	85	115	0.39	20	
WG223742													
WG223742ICV	ICV	04/26/07 17:42	II070419-1	2		1.952	mg/L	97.6	95	105			
WG223742ICB	ICB	04/26/07 17:47				U	mg/L		-0.03	0.03			
WG223742LFB	LFB	04/26/07 18:03	II070425-2	.5		.502	mg/L	100.4	85	115			
L62111-06AS	AS	04/26/07 18:16	II070425-2	.5	U	.5	mg/L	100	85	115			
L62111-06ASD	ASD	04/26/07 18:20	II070425-2	.5	U	.509	mg/L	101.8	85	115	1.78	20	
L62112-08AS	AS	04/26/07 19:10	II070425-2	1	U	.998	mg/L	99.8	85	115			
L62112-08ASD	ASD	04/26/07 19:15	II070425-2	1	U	.993	mg/L	99.3	85	115	0.5	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223756													
WG223756ICV	ICV	04/26/07 17:46	WI070308-3	2.416		2.315	mg/L	95.8	90	110			
WG223756ICB	ICB	04/26/07 17:47				U	mg/L		-0.06	0.06			
WG223756LFB1	LFB	04/26/07 17:51	WI070307-9	2		1.967	mg/L	98.4	90	110			
WG223756LFB2	LFB	04/26/07 18:29	WI070307-9	2		1.996	mg/L	99.8	90	110			
L62111-05AS	AS	04/26/07 18:31	WI070307-9	2	.42	2.325	mg/L	95.3	90	110			
L62111-06DUP	DUP	04/26/07 18:37			.45	.464	mg/L				3.1	20	
WG223759													
WG223759ICV	ICV	04/26/07 19:44	WI070308-3	2.416		2.321	mg/L	96.1	90	110			
WG223759ICB	ICB	04/26/07 19:45				U	mg/L		-0.06	0.06			
WG223759LFB1	LFB	04/26/07 19:46	WI070307-9	2		1.992	mg/L	99.6	90	110			
L62038-01AS	AS	04/26/07 19:49	WI070307-9	2	.03	2.001	mg/L	98.6	90	110			
L62038-02DUP	DUP	04/26/07 19:51			U	U	mg/L				0	20	RA
L62112-11AS	AS	04/26/07 20:07	WI070307-9	2	.1	1.973	mg/L	93.7	90	110			
WG223759LFB2	LFB	04/26/07 20:24	WI070307-9	2		2.023	mg/L	101.2	90	110			
L62117-01DUP	DUP	04/26/07 20:45			5.94	5.032	mg/L				16.6	20	

pH (lab) M150.1 - Electrometric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223712													
WG223712LCSW3	LCSW	04/26/07 18:01	PCN25442	6		6.09	units	101.5	90	110			
L62112-03DUP	DUP	04/26/07 19:40			7.9	7.83	units				0.9	20	
L62115-02DUP	DUP	04/26/07 21:06			8.1	8.15	units				0.6	20	
WG223712LCSW6	LCSW	04/26/07 21:24	PCN25442	6		6.09	units	101.5	90	110			
WG223712LCSW9	LCSW	04/27/07 0:30	PCN25442	6		6.09	units	101.5	90	110			

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: **L62112**

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	20		20.18	mg/L	100.9	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.9	0.9			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	99.61502		105.94	mg/L	106.3	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	99.61502	2.3	115.46	mg/L	113.6	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	99.61502	2.3	113.46	mg/L	111.6	85	115	1.75	20	
WG223742													
WG223742ICV	ICV	04/26/07 17:42	II070419-1	20		20.45	mg/L	102.3	95	105			
WG223742ICB	ICB	04/26/07 17:47				U	mg/L		-0.9	0.9			
WG223742LFB	LFB	04/26/07 18:03	II070425-2	99.61502		106.51	mg/L	106.9	85	115			
L62111-06AS	AS	04/26/07 18:16	II070425-2	99.61502	.8	110.28	mg/L	109.9	85	115			
L62111-06ASD	ASD	04/26/07 18:20	II070425-2	99.61502	.8	109.87	mg/L	109.5	85	115	0.37	20	
L62112-08AS	AS	04/26/07 19:10	II070425-2	199.23004	13.9	236.64	mg/L	111.8	85	115			
L62112-08ASD	ASD	04/26/07 19:15	II070425-2	199.23004	13.9	233.61	mg/L	110.3	85	115	1.29	20	

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223669													
WG223669PBW	PBW	04/25/07 14:15				U	mg/L		-20	20			
WG223669LCSW	LCSW	04/25/07 14:17	PCN26764	261		286	mg/L	109.6	80	120			
L62112-03DUP	DUP	04/25/07 14:32			2920	2912	mg/L				0.3	20	
L62113-02DUP	DUP	04/25/07 14:56			90	88	mg/L				2.2	20	RA

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223374													
WG223374ICV	ICV	04/20/07 1:55	MS070308-2	.05		.05181	mg/L	103.6	90	110			
WG223374ICB	ICB	04/20/07 2:00				U	mg/L		-0.0003	0.0003			
WG223374LFB	LFB	04/20/07 2:06	MS070227-3	.05		.04953	mg/L	99.1	85	115			
L62112-02AS	AS	04/20/07 3:36	MS070227-3	.05	.0017	.04834	mg/L	93.3	70	130			
L62112-02ASD	ASD	04/20/07 3:41	MS070227-3	.05	.0017	.04942	mg/L	95.4	70	130	2.21	20	
WG223533													
WG223533ICV	ICV	04/23/07 23:42	MS070308-2	.05		.05487	mg/L	109.7	90	110			
WG223533ICB	ICB	04/23/07 23:48				U	mg/L		-0.0003	0.0003			
WG223533LFB	LFB	04/23/07 23:53	MS070227-3	.05		.05167	mg/L	103.3	85	115			
L62079-08AS	AS	04/24/07 0:05	MS070227-3	.5	U	.4957	mg/L	99.1	70	130			
L62079-08ASD	ASD	04/24/07 0:11	MS070227-3	.5	U	.5056	mg/L	101.1	70	130	1.98	20	

Phelps Dodge Sierrita

ACZ Project ID: **L62112**

Project ID: OJ03DL

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	100		100.15	mg/L	100.2	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.9	0.9			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	99.92361		105.64	mg/L	105.7	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	99.92361	4.6	115.15	mg/L	110.6	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	99.92361	4.6	114.01	mg/L	109.5	85	115	0.99	20	
WG223742													
WG223742ICV	ICV	04/26/07 17:42	II070419-1	100		100.4	mg/L	100.4	95	105			
WG223742ICB	ICB	04/26/07 17:47				U	mg/L		-0.9	0.9			
WG223742LFB	LFB	04/26/07 18:03	II070425-2	99.92361		105.38	mg/L	105.5	85	115			
L62111-06AS	AS	04/26/07 18:16	II070425-2	99.92361	100	200.13	mg/L	100.2	85	115			
L62111-06ASD	ASD	04/26/07 18:20	II070425-2	99.92361	100	197.4	mg/L	97.5	85	115	1.37	20	
L62112-08AS	AS	04/26/07 19:10	II070425-2	199.84722	171	376.89	mg/L	103	85	115			
L62112-08ASD	ASD	04/26/07 19:15	II070425-2	199.84722	171	373.22	mg/L	101.2	85	115	0.98	20	

Sulfate SM4500 SO4-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223441													
WG223441PBW	PBW	04/20/07 14:50				U	mg/L		-30	30			
WG223441LCSW	LCSW	04/20/07 14:53	WC070419-3	100		90	mg/L	90	80	120			
L62112-07DUP	DUP	04/20/07 15:29			540	520	mg/L				3.8	20	
L62122-05DUP	DUP	04/20/07 16:05			1190	1218	mg/L				2.3	20	

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223374													
WG223374ICV	ICV	04/20/07 1:55	MS070308-2	.056		.05907	mg/L	105.5	90	110			
WG223374ICB	ICB	04/20/07 2:00				U	mg/L		-0.0003	0.0003			
WG223374LFB	LFB	04/20/07 2:06	MS070227-3	.05		.0537	mg/L	107.4	85	115			
L62112-02AS	AS	04/20/07 3:36	MS070227-3	.05	U	.04912	mg/L	98.2	70	130			
L62112-02ASD	ASD	04/20/07 3:41	MS070227-3	.05	U	.04967	mg/L	99.3	70	130	1.11	20	
WG223533													
WG223533ICV	ICV	04/23/07 23:42	MS070308-2	.056		.05588	mg/L	99.8	90	110			
WG223533ICB	ICB	04/23/07 23:48				U	mg/L		-0.0003	0.0003			
WG223533LFB	LFB	04/23/07 23:53	MS070227-3	.05		.05003	mg/L	100.1	85	115			
L62079-08AS	AS	04/24/07 0:05	MS070227-3	.5	U	.4995	mg/L	99.9	70	130			
L62079-08ASD	ASD	04/24/07 0:11	MS070227-3	.5	U	.4967	mg/L	99.3	70	130	0.56	20	

Phelps Dodge Sierrita
 Project ID: OJ03DL

ACZ Project ID: L62112

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG223592													
WG223592ICV	ICV	04/25/07 12:08	II070419-1	2		1.899	mg/L	95	95	105			
WG223592ICB	ICB	04/25/07 12:11				U	mg/L		-0.03	0.03			
WG223592LFB	LFB	04/25/07 12:24	II070418-2	.5		.53	mg/L	106	85	115			
L62112-07AS	AS	04/25/07 13:39	II070418-2	.5	.04	.5	mg/L	92	85	115			
L62112-07ASD	ASD	04/25/07 13:42	II070418-2	.5	.04	.532	mg/L	98.4	85	115	6.2	20	
WG223595													
WG223595ICV	ICV	04/25/07 14:17	II070419-1	2		1.916	mg/L	95.8	95	105			
WG223595ICB	ICB	04/25/07 14:20				U	mg/L		-0.03	0.03			
WG223595LFB	LFB	04/25/07 14:33	II070418-2	.5		.519	mg/L	103.8	85	115			
L62113-01AS	AS	04/25/07 15:02	II070418-2	.5	1.25	1.719	mg/L	93.8	85	115			
L62113-01ASD	ASD	04/25/07 15:05	II070418-2	.5	1.25	1.708	mg/L	91.6	85	115	0.64	20	

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ACZ Project ID: **L62112**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62112-01	WG223597	Chloride	M325.2 - Colorimetric	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG223730	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).
	WG223723	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
			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).
WG223669	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.	
L62112-02	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG223730	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).
	WG223723	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
			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).
WG223669	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.	
L62112-03	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223730	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).
	WG223723	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
			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).
WG223669	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.	
L62112-04	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223730	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).
	WG223723	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
			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).
WG223669	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.	

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ACZ Project ID: **L62112**

ACZ ID	WORK NUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62112-05	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223723	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
			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).
WG223669	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.	
L62112-06	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223723	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
			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).
	WG223759	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
WG223669	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.	
L62112-07	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223592	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223723	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
			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).
WG223759	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).	
WG223669	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.	

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ACZ Project ID: **L62112**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62112-08	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223592	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223723	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).
	WG223759	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223669	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).
L62112-09	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223592	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223723	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).
	WG223759	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223669	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).
L62112-10	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223592	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223723	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).
	WG223759	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG223669	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).

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ACZ Project ID: **L62112**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62112-11	WG223595	Aluminum, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223374	Arsenic, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
	WG223597	Chloride	M325.2 - Colorimetric	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG223723	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).
	WG223669	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).

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ACZ Project ID: **L62112**

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: L62112
Date Received: 4/19/2007
Received By:
Date Printed: 4/19/2007

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)

N/A

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
354	3.8	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: L62112
Date Received: 4/19/2007
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
L62112-01	IW-9		Y		Y							
L62112-02	IW-12		Y		Y							
L62112-03	IW-15		Y		Y							
L62112-04	IW-20		Y		Y							
L62112-05	MH-28		Y		Y							
L62112-06	MH-29		Y		Y							
L62112-07	PZ-8		Y		Y							
L62112-08	MH-13A		Y		Y							
L62112-09	MH-13B		Y		Y							
L62112-10	MH-13C		Y		Y							
L62112-11	DUP041807A		Y		Y							
L62112-12	CNTB040607-04									X		
L62112-13	TB040607-10									X		

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
TK	Filtered/Nitric	BLACK	pH must be < 2
J	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.

L62112

CHAIN of CUSTODY

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

Report to:

Name: <i>Billy Dorris</i>	Address: <i>6200 W. Duval Mine Rd</i>
Company: <i>Phelps Dodge Sierrita</i>	<i>Green Valley AZ 85614</i>
E-mail: <i>Billy-Dorris@FMI.com</i>	Telephone: <i>520 648 8873</i>

Copy of Report to:

Name: <i>Jim Norris</i>	E-mail: <i>jimn@hginc.com</i>
Company: <i>Hydro Geo Chem</i>	Telephone: <i>520-293-1500 Ext 112</i>

Invoice to:

Name:	Address:
Company:	
E-mail:	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 #:	Reporting state for compliance testing:	Sampler's Name:	Are any samples NRC licensable material?	SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers											
	<i>OJ03 DL</i>				<i>IW-9</i>	<i>4-17-07 / 9:20</i>	<i>GW</i>	<i>9</i>											
					<i>IW-12</i>	<i>4-17-07 / 9:55</i>	<i>GW</i>	<i>9</i>	} <i>AMBIENT SUITE</i>										
					<i>IW-15</i>	<i>4-17-07 / 13:10</i>	<i>GW</i>	<i>9</i>											
					<i>IW-20</i>	<i>4-17-07 / 12:55</i>	<i>GW</i>	<i>9</i>											
					<i>MH-28</i>	<i>4-17-07 / 13:35</i>	<i>GW</i>	<i>9</i>											
					<i>MH-29</i>	<i>4-17-07 / 9:43</i>	<i>GW</i>	<i>9</i>											
					<i>PZ-8</i>	<i>4-17-07 / 8:32</i>	<i>GW</i>	<i>9</i>											
					<i>MH-13A</i>	<i>4-18-07 / 11:27</i>	<i>GW</i>	<i>9</i>											
					<i>MH-13B</i>	<i>4-18-07 / 12:23</i>	<i>GW</i>	<i>9</i>											
					<i>MH-13C</i>	<i>4-18-07 / 10:47</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

DUP041807A 4-18-07 GW 9

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>4-18-07/15:00</i>	<i>MSS</i>	<i>4-19-07 11:48</i>

June 19, 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: L63014

Bill Dorris:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 05, 2007. This project has been assigned to ACZ's project number, L63014. 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 L63014. 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 July 19, 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.

19/Jun/07

Scott Habermehl, Project Manager, has reviewed and approved this report in its entirety.



Phelps Dodge Sierrita

Project ID: OJ03DL

Sample ID: ESP-4

ACZ Sample ID: **L63014-01**

Date Sampled: 06/04/07 11:00

Date Received: 06/05/07

Sample Matrix: Ground Water

Wet Chemistry

Parameter	EPA Method	Result	Qual	XG	Units	MDL	PQL	Date	Analyst
Sulfate	300.0 - Ion Chromatography	385			mg/L	5	30	06/18/07 11:47	jlf

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.

helps Dodge Sierrita

ACZ Project ID: **L63014**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
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No extended qualifiers associated with this analysis

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ACZ Project ID: **L63014**

No certification qualifiers associated with this analysis