



17-Mar-2011

Marla Miller
Malcolm Pirnie
211 N Florence Street
Suite 202
El Paso, TX 79901

Tel: (602) 797-4699
Fax: (915) 533-9045

Re: El Paso Smelter

Work Order: **1103192**

Dear Marla,

ALS Environmental received 1 sample on 05-Mar-2011 09:10 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

J ayL ynn F T hibault

Electronically approved by: Mary K. Knowles

JayLynn F Thibault
Project Manager



Certificate No: TX: T104704231-10-3

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Client: Malcolm Pirnie
Project: El Paso Smelter
Work Order: 1103192

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1103192-01	QA030411	Water		3/4/2011 15:00	3/5/2011 09:10	<input type="checkbox"/>

ALS Environmental

Date: 17-Mar-11

Client: Malcolm Pirnie
Project: El Paso Smelter
Work Order: 1103192

Case Narrative

Batch 50788 Metals (sample 1011280-02) MS/MSD unrelated sample.

Batch 50794 Metals (sample 10113119-10) MS/MSD unrelated sample.

ALS Environmental

Date: 17-Mar-11

Client: Malcolm Pirnie
Project: El Paso Smelter
Sample ID: QA030411
Collection Date: 3/4/2011 03:00 PM

Work Order: 1103192
Lab ID: 1103192-01
Matrix: WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
DISSOLVED MERCURY			Method: SW7470		Prep: SW7470 / 3/11/11		Analyst: JCJ
Mercury	0.000398		0.000042	0.000200	mg/L	1	3/11/2011 17:25
MERCURY			Method: SW7470		Prep: SW7470 / 3/14/11		Analyst: JCJ
Mercury	0.000856		0.000042	0.000200	mg/L	1	3/14/2011 18:33
DISSOLVED METALS			Method: SW6020		Prep: SW3010A / 3/14/11		Analyst: IGF
Antimony	0.623		0.00050	0.00500	mg/L	1	3/15/2011 16:09
Arsenic	6.82		0.045	0.250	mg/L	50	3/15/2011 18:23
Barium	0.00407	J	0.00070	0.00500	mg/L	1	3/15/2011 16:09
Cadmium	0.0537		0.00060	0.00200	mg/L	1	3/15/2011 16:09
Chromium	U		0.00060	0.00500	mg/L	1	3/15/2011 16:09
Cobalt	0.00141	J	0.00050	0.00500	mg/L	1	3/15/2011 16:09
Copper	0.00878		0.00050	0.00500	mg/L	1	3/15/2011 16:09
Iron	U		0.036	0.200	mg/L	1	3/15/2011 16:09
Lead	0.00117	J	0.00040	0.00500	mg/L	1	3/15/2011 16:09
Molybdenum	0.941		0.00060	0.00500	mg/L	1	3/15/2011 16:09
Nickel	0.00654		0.0014	0.00500	mg/L	1	3/15/2011 16:09
Selenium	0.341		0.0025	0.00500	mg/L	1	3/15/2011 16:09
Thallium	0.0122		0.00080	0.00200	mg/L	1	3/15/2011 16:09
Zinc	4.35		0.12	0.250	mg/L	50	3/15/2011 18:23
METALS			Method: SW6020		Prep: SW3010A / 3/14/11		Analyst: ALR
Aluminum	0.114		0.037	0.100	mg/L	10	3/16/2011 01:30
Antimony	1.58		0.050	0.500	mg/L	100	3/15/2011 13:50
Arsenic	27.1		0.090	0.500	mg/L	100	3/15/2011 13:50
Barium	0.0106		0.0014	0.0100	mg/L	2	3/15/2011 13:55
Cadmium	0.0718		0.0012	0.00400	mg/L	2	3/15/2011 13:55
Calcium	522		5.0	50.0	mg/L	100	3/15/2011 13:50
Chromium	U		0.0060	0.0500	mg/L	10	3/16/2011 01:30
Cobalt	U		0.0050	0.0500	mg/L	10	3/16/2011 01:30
Copper	0.123		0.0050	0.0500	mg/L	10	3/16/2011 01:30
Iron	7.51		0.36	2.00	mg/L	10	3/16/2011 01:30
Lead	0.00686	J	0.00080	0.0100	mg/L	2	3/15/2011 13:55
Magnesium	154		3.9	20.0	mg/L	100	3/15/2011 13:50
Manganese	2.02		0.080	0.500	mg/L	100	3/15/2011 13:50
Molybdenum	2.12		0.060	0.500	mg/L	100	3/15/2011 13:50
Nickel	0.0165	J	0.014	0.0500	mg/L	10	3/16/2011 01:30
Potassium	210		10	20.0	mg/L	100	3/15/2011 13:50
Selenium	0.503		0.025	0.0500	mg/L	10	3/16/2011 01:30
Sodium	1,400		10	20.0	mg/L	100	3/15/2011 13:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 17-Mar-11

Client: Malcolm Pirnie
Project: El Paso Smelter
Sample ID: QA030411
Collection Date: 3/4/2011 03:00 PM

Work Order: 1103192
Lab ID: 1103192-01
Matrix: WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
Thallium	0.0166		0.0016	0.00400	mg/L	2	3/15/2011 13:55
Zinc	13.7		0.25	0.500	mg/L	100	3/15/2011 13:50
ANIONS		Method: E300				Analyst: TDW	
Chloride	393		2.00	5.00	mg/L	10	3/7/2011 13:38
Fluoride	3.36		0.0500	0.100	mg/L	1	3/5/2011 14:50
Nitrogen, Nitrate (As N)	U		0.0300	0.100	mg/L	1	3/5/2011 14:50
Nitrogen, Nitrite (As N)	U		0.0300	0.100	mg/L	1	3/5/2011 14:50
Sulfate	3,180		50.0	50.0	mg/L	100	3/5/2011 15:11
Nitrate/Nitrite (as N)	U		0.0300	0.100	mg/L	1	3/5/2011 14:50
Surr: Selenate (surr)	95.9			85-115	%REC	1	3/5/2011 14:50
Surr: Selenate (surr)	106			85-115	%REC	100	3/5/2011 15:11
Surr: Selenate (surr)	105			85-115	%REC	10	3/7/2011 13:38
ALKALINITY		Method: SM2320B				Analyst: DM	
Alkalinity, Total (As CaCO3)	663		2.0	5.00	mg/L	1	3/14/2011 15:30
SULFIDE		Method: SM4500 S2-F				Analyst: JBA	
Sulfide	U		0.50	1.00	mg/L	1	3/11/2011 08:30
TOTAL DISSOLVED SOLIDS		Method: M2540C				Analyst: JKP	
Total Dissolved Solids (Residue, Filterable)	6,850		5.0	10.0	mg/L	1	3/10/2011 11:00
TOTAL ORGANIC CARBON		Method: SM5310C				Analyst: JKP	
Organic Carbon, Total	7.63		0.10	0.500	mg/L	1	3/12/2011 22:19
TOTAL SUSPENDED SOLIDS		Method: M2540D				Analyst: JKP	
Suspended Solids (Residue, Non-Filterable)	50.7		2.00	2.00	mg/L	1	3/9/2011 11:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50736** Instrument ID **Mercury** Method: **SW7470** (**Dissolve**)

MBLK	Sample ID: GBLKW2-031111-50736						Units: mg/L	Analysis Date: 3/11/2011 04:46 PM			
Client ID:	Run ID: MERCURY_110311A						SeqNo: 2309539	Prep Date: 3/11/2011	DF: 1		
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	U	0.00020									

LCS	Sample ID: GLCSW2-031111-50736						Units: mg/L	Analysis Date: 3/11/2011 04:48 PM			
Client ID:	Run ID: MERCURY_110311A						SeqNo: 2309540	Prep Date: 3/11/2011	DF: 1		
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.00455	0.00020	0.005	0	91	80-120	0				

MS	Sample ID: 1103221-01BMS						Units: mg/L	Analysis Date: 3/11/2011 04:54 PM			
Client ID:	Run ID: MERCURY_110311A						SeqNo: 2309543	Prep Date: 3/11/2011	DF: 1		
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.00455	0.00020	0.005	0.000059	89.8	80-120	0				

MSD	Sample ID: 1103221-01BMSD						Units: mg/L	Analysis Date: 3/11/2011 04:56 PM			
Client ID:	Run ID: MERCURY_110311A						SeqNo: 2309544	Prep Date: 3/11/2011	DF: 1		
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.00467	0.00020	0.005	0.000059	92.2	80-120	0.00455	2.6	20		

DUP	Sample ID: 1103221-01BDUP						Units: mg/L	Analysis Date: 3/11/2011 04:52 PM			
Client ID:	Run ID: MERCURY_110311A						SeqNo: 2309542	Prep Date: 3/11/2011	DF: 1		
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.00006	0.00020	0	0	0	-0 0	0.000059	0	20	J	

The following samples were analyzed in this batch: 1103192-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50779** Instrument ID **Mercury** Method: **SW7470**

MBLK		Sample ID: GBLKW1-031411-50779				Units: mg/L		Analysis Date: 3/14/2011 05:27 PM		
Client ID:		Run ID: MERCURY_110314A				SeqNo: 2311877		Prep Date: 3/14/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.00020								

LCS		Sample ID: GLCSW1-031411-50779				Units: mg/L		Analysis Date: 3/14/2011 05:29 PM		
Client ID:		Run ID: MERCURY_110314A				SeqNo: 2311878		Prep Date: 3/14/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00476	0.00020	0.005	0	95.2	85-115	0			

MS		Sample ID: 1103297-02BMS				Units: mg/L		Analysis Date: 3/14/2011 05:37 PM		
Client ID:		Run ID: MERCURY_110314A				SeqNo: 2311881		Prep Date: 3/14/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00504	0.00020	0.005	0.000008	101	85-115	0			

MSD		Sample ID: 1103297-02BMSD				Units: mg/L		Analysis Date: 3/14/2011 05:40 PM		
Client ID:		Run ID: MERCURY_110314A				SeqNo: 2311882		Prep Date: 3/14/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00502	0.00020	0.005	0.000008	100	85-115	0.00504	0.398	20	

DUP		Sample ID: 1103297-02BDUP				Units: mg/L		Analysis Date: 3/14/2011 05:35 PM		
Client ID:		Run ID: MERCURY_110314A				SeqNo: 2311880		Prep Date: 3/14/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.00020	0	0	0	-0 0	0.000008	0	20	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50788** Instrument ID **ICPMS04** Method: **SW6020**

MBLK	Sample ID: MBLKW1-031411-50788	Units: mg/L				Analysis Date: 3/14/2011 04:00 PM				
Client ID:	Run ID: ICPMS04_110314A	SeqNo: 2311745	Prep Date: 3/14/2011	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	U	0.010								
Antimony	U	0.0050								
Arsenic	U	0.0050								
Barium	U	0.0050								
Cadmium	U	0.0020								
Calcium	U	0.50								
Chromium	U	0.0050								
Cobalt	U	0.0050								
Copper	U	0.0050								
Iron	U	0.20								
Lead	U	0.0050								
Magnesium	U	0.20								
Manganese	U	0.0050								
Molybdenum	U	0.0050								
Nickel	U	0.0050								
Potassium	U	0.20								
Selenium	U	0.0050								
Sodium	U	0.20								
Thallium	U	0.0020								
Zinc	0.003802	0.0050								J

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50788** Instrument ID **ICPMS04** Method: **SW6020**

LCS		Sample ID: MLCSW1-031411-50788			Units: mg/L		Analysis Date: 3/14/2011 04:06 PM			
Client ID:		Run ID: ICPMS04_110314A			SeqNo: 2311746		Prep Date: 3/14/2011		DF: 1	
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1063	0.010	0.1	0	106	80-120	0			
Antimony	0.04958	0.0050	0.05	0	99.2	80-120	0			
Arsenic	0.05055	0.0050	0.05	0	101	80-120	0			
Barium	0.05168	0.0050	0.05	0	103	80-120	0			
Cadmium	0.05108	0.0020	0.05	0	102	80-120	0			
Calcium	4.994	0.50	5	0	99.9	80-120	0			
Chromium	0.04833	0.0050	0.05	0	96.7	80-120	0			
Cobalt	0.05017	0.0050	0.05	0	100	80-120	0			
Copper	0.05255	0.0050	0.05	0	105	80-120	0			
Iron	4.976	0.20	5	0	99.5	80-120	0			
Lead	0.05114	0.0050	0.05	0	102	80-120	0			
Magnesium	5.138	0.20	5	0	103	80-120	0			
Manganese	0.0502	0.0050	0.05	0	100	80-120	0			
Molybdenum	0.05152	0.0050	0.05	0	103	80-120	0			
Nickel	0.05162	0.0050	0.05	0	103	80-120	0			
Potassium	4.956	0.20	5	0	99.1	80-120	0			
Selenium	0.04926	0.0050	0.05	0	98.5	80-120	0			
Sodium	5.102	0.20	5	0	102	80-120	0			
Thallium	0.05078	0.0020	0.05	0	102	80-120	0			
Zinc	0.05293	0.0050	0.05	0	106	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50788** Instrument ID **ICPMS04** Method: **SW6020**

MS		Sample ID: 1103280-02CMS			Units: mg/L		Analysis Date: 3/14/2011 04:32 PM			
Client ID:		Run ID: ICPMS04_110314A			SeqNo: 2311751		Prep Date: 3/14/2011		DF: 1	
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.109	0.010	0.1	0	109	80-120	0			
Antimony	0.053	0.0050	0.05	0	106	80-120	0			
Arsenic	0.05285	0.0050	0.05	0	106	80-120	0			
Barium	0.9012	0.0050	0.05	0.8345	133	80-120	0			SO
Cadmium	0.04958	0.0020	0.05	0	99.2	80-120	0			
Calcium	114.7	0.50	5	135.3	-412	80-120	0			SO
Chromium	0.05042	0.0050	0.05	0	101	80-120	0			
Cobalt	0.05075	0.0050	0.05	0	102	80-120	0			
Copper	0.05247	0.0050	0.05	0	105	80-120	0			
Iron	5.03	0.20	5	0	101	80-120	0			
Lead	0.04955	0.0050	0.05	0	99.1	80-120	0			
Magnesium	15.6	0.20	5	11.54	81.3	80-120	0			
Manganese	0.06341	0.0050	0.05	0.01328	100	80-120	0			
Molybdenum	0.04956	0.0050	0.05	0	99.1	80-120	0			
Nickel	0.04963	0.0050	0.05	0	99.3	80-120	0			
Potassium	5.011	0.20	5	0.3931	92.4	80-120	0			
Selenium	0.04921	0.0050	0.05	0	98.4	80-120	0			
Sodium	41.19	0.20	5	39.26	38.6	80-120	0			SO
Thallium	0.04993	0.0020	0.05	0	99.9	80-120	0			
Zinc	0.05927	0.0050	0.05	0.005976	107	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50788** Instrument ID **ICPMS04** Method: **SW6020**

MSD		Sample ID: 1103280-02CMSD			Units: mg/L			Analysis Date: 3/14/2011 04:38 PM		
Client ID:		Run ID: ICPMS04_110314A			SeqNo: 2311752		Prep Date: 3/14/2011		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1098	0.010	0.1	0	110	80-120	0.109	0.76	15	
Antimony	0.05328	0.0050	0.05	0	107	80-120	0.053	0.527	15	
Arsenic	0.05165	0.0050	0.05	0	103	80-120	0.05285	2.31	15	
Barium	0.8835	0.0050	0.05	0.8345	98	80-120	0.9012	1.98	15	O
Cadmium	0.05118	0.0020	0.05	0	102	80-120	0.04958	3.17	15	
Calcium	109.9	0.50	5	135.3	-507	80-120	114.7	4.25	15	SO
Chromium	0.05148	0.0050	0.05	0	103	80-120	0.05042	2.08	15	
Cobalt	0.05053	0.0050	0.05	0	101	80-120	0.05075	0.444	15	
Copper	0.0525	0.0050	0.05	0	105	80-120	0.05247	0.0533	15	
Iron	5.112	0.20	5	0	102	80-120	5.03	1.61	15	
Lead	0.05006	0.0050	0.05	0	100	80-120	0.04955	1.04	15	
Magnesium	15.27	0.20	5	11.54	74.5	80-120	15.6	2.18	15	S
Manganese	0.06301	0.0050	0.05	0.01328	99.5	80-120	0.06341	0.63	15	
Molybdenum	0.05067	0.0050	0.05	0	101	80-120	0.04956	2.22	15	
Nickel	0.04927	0.0050	0.05	0	98.5	80-120	0.04963	0.732	15	
Potassium	5.109	0.20	5	0.3931	94.3	80-120	5.011	1.93	15	
Selenium	0.05371	0.0050	0.05	0	107	80-120	0.04921	8.74	15	
Sodium	40.28	0.20	5	39.26	20.4	80-120	41.19	2.23	15	SO
Thallium	0.04983	0.0020	0.05	0	99.7	80-120	0.04993	0.209	15	
Zinc	0.06211	0.0050	0.05	0.005976	112	80-120	0.05927	4.67	15	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50788** Instrument ID **ICPMS04** Method: **SW6020**

DUP	Sample ID: 1103280-02CDUP	Units: mg/L					Analysis Date: 3/14/2011 04:25 PM				
Client ID:	Run ID: ICPMS04_110314A	SeqNo: 2311750			Prep Date: 3/14/2011		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Aluminum	0.01095	0.010	0	0	0	-0 0	0	200	25	R	
Antimony	U	0.0050	0	0	0	-0 0	0	0	25		
Arsenic	0.001047	0.0050	0	0	0	-0 0	0	0	25	J	
Barium	0.8428	0.0050	0	0	0	-0 0	0.8345	0.985	25		
Cadmium	U	0.0020	0	0	0	-0 0	0	0	25		
Calcium	103.2	0.50	0	0	0	-0 0	135.3	26.9	25	R	
Chromium	0.000656	0.0050	0	0	0	-0 0	0	0	25	J	
Cobalt	U	0.0050	0	0	0	-0 0	0	0	25		
Copper	0.000567	0.0050	0	0	0	-0 0	0	0	25	J	
Iron	U	0.20	0	0	0	-0 0	0	0	25		
Lead	U	0.0050	0	0	0	-0 0	0	0	25		
Magnesium	10.76	0.20	0	0	0	-0 0	11.54	7	25		
Manganese	0.01283	0.0050	0	0	0	-0 0	0.01328	3.42	25		
Molybdenum	U	0.0050	0	0	0	-0 0	0	0	25		
Nickel	0.002883	0.0050	0	0	0	-0 0	0	0	25	J	
Potassium	0.2925	0.20	0	0	0	-0 0	0.3931	29.3	25	R	
Selenium	U	0.0050	0	0	0	-0 0	0	0	25		
Sodium	36.25	0.20	0	0	0	-0 0	39.26	7.98	25		
Thallium	U	0.0020	0	0	0	-0 0	0	0	25		
Zinc	0.007486	0.0050	0	0	0	-0 0	0.005976	22.4	25		

The following samples were analyzed in this batch: | 1103192-01A |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50794** Instrument ID **ICP7500** Method: **SW6020** (**Dissolve**)

MBLK Sample ID: **MBLKW4-031411-50794** Units: **mg/L** Analysis Date: **3/14/2011 08:19 PM**

Client ID: Run ID: **ICP7500_110314A** SeqNo: **2312057** Prep Date: **3/14/2011** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.0050								
Arsenic	U	0.0050								
Barium	U	0.0050								
Cadmium	U	0.0020								
Chromium	U	0.0050								
Cobalt	U	0.0050								
Copper	U	0.0050								
Iron	U	0.20								
Lead	U	0.0050								
Molybdenum	U	0.0050								
Nickel	U	0.0050								
Selenium	U	0.0050								
Thallium	U	0.0020								
Zinc	U	0.0050								

LCS Sample ID: **MLCSW4-031411-50794** Units: **mg/L** Analysis Date: **3/14/2011 08:24 PM**

Client ID: Run ID: **ICP7500_110314A** SeqNo: **2312059** Prep Date: **3/14/2011** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.04961	0.0050	0.05	0	99.2	80-120	0			
Arsenic	0.05152	0.0050	0.05	0	103	80-120	0			
Barium	0.04987	0.0050	0.05	0	99.7	80-120	0			
Cadmium	0.05038	0.0020	0.05	0	101	80-120	0			
Chromium	0.04905	0.0050	0.05	0	98.1	80-120	0			
Cobalt	0.04928	0.0050	0.05	0	98.6	80-120	0			
Copper	0.05006	0.0050	0.05	0	100	80-120	0			
Iron	4.963	0.20	5	0	99.3	80-120	0			
Lead	0.04912	0.0050	0.05	0	98.2	80-120	0			
Molybdenum	0.04716	0.0050	0.05	0	94.3	80-120	0			
Nickel	0.05107	0.0050	0.05	0	102	80-120	0			
Selenium	0.05382	0.0050	0.05	0	108	80-120	0			
Thallium	0.04805	0.0020	0.05	0	96.1	80-120	0			
Zinc	0.05642	0.0050	0.05	0	113	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50794** Instrument ID **ICP7500** Method: **SW6020** (**Dissolve**)

MS		Sample ID: 1103119-10BMS				Units: mg/L		Analysis Date: 3/15/2011 03:47 PM			
Client ID:		Run ID: ICP7500_110315A				SeqNo: 2313471		Prep Date: 3/14/2011		DF: 1	
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Antimony	0.06255	0.0050	0.05	-7.053E-05	125	75-125	0			S	
Arsenic	0.06388	0.0050	0.05	-0.0003799	129	75-125	0			S	
Barium	0.06225	0.0050	0.05	0.000612	123	75-125	0				
Cadmium	0.06195	0.0020	0.05	0.0001108	124	75-125	0				
Chromium	0.06124	0.0050	0.05	0.0001017	122	75-125	0				
Cobalt	0.06159	0.0050	0.05	-0.0002199	124	75-125	0				
Copper	0.06213	0.0050	0.05	-0.0001389	125	75-125	0				
Iron	6.247	0.20	5	-0.01159	125	75-125	0			S	
Lead	0.0617	0.0050	0.05	0.0002825	123	75-125	0				
Molybdenum	0.06066	0.0050	0.05	0.000233	121	75-125	0				
Nickel	0.06147	0.0050	0.05	0.0001953	123	75-125	0				
Selenium	0.06326	0.0050	0.05	-0.0001419	127	75-125	0			S	
Thallium	0.06143	0.0020	0.05	0.0004478	122	75-125	0				
Zinc	0.06439	0.0050	0.05	0.005936	117	75-125	0				

MSD		Sample ID: 1103119-10BMSD				Units: mg/L		Analysis Date: 3/15/2011 03:53 PM			
Client ID:		Run ID: ICP7500_110315A				SeqNo: 2313472		Prep Date: 3/14/2011		DF: 1	
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Antimony	0.06195	0.0050	0.05	-7.053E-05	124	75-125	0.06255	0.964	25		
Arsenic	0.06273	0.0050	0.05	-0.0003799	126	75-125	0.06388	1.82	25	S	
Barium	0.0616	0.0050	0.05	0.000612	122	75-125	0.06225	1.05	25		
Cadmium	0.06052	0.0020	0.05	0.0001108	121	75-125	0.06195	2.34	25		
Chromium	0.06148	0.0050	0.05	0.0001017	123	75-125	0.06124	0.391	25		
Cobalt	0.06131	0.0050	0.05	-0.0002199	123	75-125	0.06159	0.456	25		
Copper	0.06184	0.0050	0.05	-0.0001389	124	75-125	0.06213	0.468	25		
Iron	6.204	0.20	5	-0.01159	124	75-125	6.247	0.691	25		
Lead	0.06135	0.0050	0.05	0.0002825	122	75-125	0.0617	0.569	25		
Molybdenum	0.06124	0.0050	0.05	0.000233	122	75-125	0.06066	0.952	25		
Nickel	0.06157	0.0050	0.05	0.0001953	123	75-125	0.06147	0.163	25		
Selenium	0.06426	0.0050	0.05	-0.0001419	129	75-125	0.06326	1.57	25	S	
Thallium	0.0609	0.0020	0.05	0.0004478	121	75-125	0.06143	0.867	25		
Zinc	0.06358	0.0050	0.05	0.005936	115	75-125	0.06439	1.27	25		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50794** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

DUP		Sample ID: 1103119-10BDUP				Units: mg/L		Analysis Date: 3/15/2011 03:41 PM		
Client ID:		Run ID: ICP7500_110315A				SeqNo: 2313470		Prep Date: 3/14/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.0050	0	0	0	-0 0	-7.053E-05	0	25	
Arsenic	U	0.0050	0	0	0	-0 0	-0.0003799	0	25	
Barium	0.0008277	0.0050	0	0	0	-0 0	0.000612	0	25	J
Cadmium	U	0.0020	0	0	0	-0 0	0.0001108	0	25	
Chromium	U	0.0050	0	0	0	-0 0	0.0001017	0	25	
Cobalt	U	0.0050	0	0	0	-0 0	-0.0002199	0	25	
Copper	0.000905	0.0050	0	0	0	-0 0	-0.0001389	0	25	J
Iron	U	0.20	0	0	0	-0 0	-0.01159	0	25	
Lead	0.0005214	0.0050	0	0	0	-0 0	0.0002825	0	25	J
Molybdenum	U	0.0050	0	0	0	-0 0	0.000233	0	25	
Nickel	U	0.0050	0	0	0	-0 0	0.0001953	0	25	
Selenium	U	0.0050	0	0	0	-0 0	-0.0001419	0	25	
Thallium	U	0.0020	0	0	0	-0 0	0.0004478	0	25	
Zinc	0.008746	0.0050	0	0	0	-0 0	0.005936	38.3	25	R

The following samples were analyzed in this batch:

1103192-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106404** Instrument ID **ICS3000** Method: **E300**

MBLK		Sample ID: WBLKW1-030511-R106404			Units: mg/L			Analysis Date: 3/5/2011 12:22 PM		
Client ID:		Run ID: ICS3000_110305A			SeqNo: 2301769		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.50								
Fluoride	U	0.10								
Nitrogen, Nitrate (As N)	U	0.10								
Nitrogen, Nitrite (As N)	U	0.10								
Sulfate	U	0.50								
Nitrate/Nitrite (as N)	U	0.10								
<i>Surr: Selenate (surr)</i>	<i>5.187</i>	<i>0.10</i>	<i>5</i>	<i>0</i>	<i>104</i>	<i>85-115</i>	<i>0</i>			

LCS		Sample ID: WLCSW1-030511-R106404			Units: mg/L			Analysis Date: 3/5/2011 12:43 PM		
Client ID:		Run ID: ICS3000_110305A			SeqNo: 2301770		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.07	0.50	20	0	100	90-110	0			
Fluoride	3.946	0.10	4	0	98.6	90-110	0			
Nitrogen, Nitrate (As N)	3.921	0.10	4	0	98	90-110	0			
Nitrogen, Nitrite (As N)	4.011	0.10	4	0	100	90-110	0			
Sulfate	19.59	0.50	20	0	98	90-110	0			
Nitrate/Nitrite (as N)	7.932	0.10	8	0	99.2	90-110	0			
<i>Surr: Selenate (surr)</i>	<i>5.24</i>	<i>0.10</i>	<i>5</i>	<i>0</i>	<i>105</i>	<i>85-115</i>	<i>0</i>			

LCSD		Sample ID: WLCSDW1-030511-R106404			Units: mg/L			Analysis Date: 3/5/2011 01:04 PM		
Client ID:		Run ID: ICS3000_110305A			SeqNo: 2301771		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.94	0.50	20	0	99.7	90-110	20.07	0.635	20	
Fluoride	3.923	0.10	4	0	98.1	90-110	3.946	0.585	20	
Nitrogen, Nitrate (As N)	3.891	0.10	4	0	97.3	90-110	3.921	0.768	20	
Nitrogen, Nitrite (As N)	3.98	0.10	4	0	99.5	90-110	4.011	0.776	20	
Sulfate	19.46	0.50	20	0	97.3	90-110	19.59	0.702	20	
Nitrate/Nitrite (as N)	7.871	0.10	8	0	98.4	90-110	7.932	0.772	20	
<i>Surr: Selenate (surr)</i>	<i>5.22</i>	<i>0.10</i>	<i>5</i>	<i>0</i>	<i>104</i>	<i>85-115</i>	<i>5.24</i>	<i>0.382</i>	<i>20</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106404** Instrument ID **ICS3000** Method: **E300**

MS		Sample ID: 1103016-04AMS			Units: mg/L		Analysis Date: 3/7/2011 12:55 PM			
Client ID:		Run ID: ICS3000_110305A			SeqNo: 2301793		Prep Date:		DF: 1000	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	23040	500	10000	13030	100	80-120	0			
Fluoride	1942	100	2000	0	97.1	80-120	0			
Nitrogen, Nitrate (As N)	1944	100	2000	0	97.2	80-120	0			H
Nitrogen, Nitrite (As N)	1994	100	2000	0	99.7	80-120	0			H
Sulfate	17700	500	10000	7756	99.4	80-120	0			
Nitrate/Nitrite (as N)	3938	100	4000	0	98.4	80-120	0			H
<i>Surr: Selenate (surr)</i>	<i>5109</i>	<i>100</i>	<i>5000</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>			

MSD		Sample ID: 1103016-04AMSD			Units: mg/L		Analysis Date: 3/7/2011 01:17 PM			
Client ID:		Run ID: ICS3000_110305A			SeqNo: 2301795		Prep Date:		DF: 1000	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	23100	500	10000	13030	101	80-120	23040	0.262	20	
Fluoride	1949	100	2000	0	97.4	80-120	1942	0.339	20	
Nitrogen, Nitrate (As N)	1955	100	2000	0	97.7	80-120	1944	0.523	20	H
Nitrogen, Nitrite (As N)	1999	100	2000	0	100	80-120	1994	0.276	20	H
Sulfate	17760	500	10000	7756	100	80-120	17700	0.374	20	
Nitrate/Nitrite (as N)	3954	100	4000	0	98.8	80-120	3938	0.398	20	H
<i>Surr: Selenate (surr)</i>	<i>5236</i>	<i>100</i>	<i>5000</i>	<i>0</i>	<i>105</i>	<i>85-115</i>	<i>5109</i>	<i>2.46</i>	<i>20</i>	

The following samples were analyzed in this batch: | 1103192-01C |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106548** Instrument ID **Balance1** Method: **M2540D**

MBLK		Sample ID: BLANK-R106548				Units: mg/L		Analysis Date: 3/9/2011 11:00 AM		
Client ID:		Run ID: BALANCE1_110309A				SeqNo: 2305406		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Suspended Solids (Residue, Non-Fi	U	2.0								

LCS		Sample ID: LCS-R106548				Units: mg/L		Analysis Date: 3/9/2011 11:00 AM		
Client ID:		Run ID: BALANCE1_110309A				SeqNo: 2305407		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Suspended Solids (Residue, Non-Fi	86	2.0	100	0	86	78-120	0			

DUP		Sample ID: 1103263-01BDUP				Units: mg/L		Analysis Date: 3/9/2011 11:00 AM		
Client ID:		Run ID: BALANCE1_110309A				SeqNo: 2305405		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Suspended Solids (Residue, Non-Fi	12.67	2.0	0	0	0	0-0	10.67	17.1	20	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106677** Instrument ID **BALANCE1** Method: **M2540C**

MBLK		Sample ID: BLANK-R106677				Units: mg/L		Analysis Date: 3/10/2011 11:00 AM		
Client ID:		Run ID: BALANCE1_110310B				SeqNo: 2308962		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10								

LCS		Sample ID: LCS-R106677				Units: mg/L		Analysis Date: 3/10/2011 11:00 AM		
Client ID:		Run ID: BALANCE1_110310B				SeqNo: 2308963		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1070	10	1000	0	107	85-115	0			

DUP		Sample ID: 1103148-01EDUP				Units: mg/L		Analysis Date: 3/10/2011 11:00 AM		
Client ID:		Run ID: BALANCE1_110310B				SeqNo: 2308959		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	5000	10	0	0	0	0-0	4915	1.71	20	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: R106735 Instrument ID TOC_W Method: SM5310C

MBLK		Sample ID: WBLKW1-031211-R106735				Units: mg/L		Analysis Date: 3/12/2011 02:37 PM		
Client ID:		Run ID: TOC_W_110312B				SeqNo: 2310080		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	0.284	0.50								J

LCS		Sample ID: WLCSW1-031211-R106735				Units: mg/L		Analysis Date: 3/12/2011 03:06 PM		
Client ID:		Run ID: TOC_W_110312B				SeqNo: 2310081		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.074	0.50	10	0	90.7	80-120	0			

LCSD		Sample ID: WLCSDW1-03121-R106735				Units: mg/L		Analysis Date: 3/12/2011 03:35 PM		
Client ID:		Run ID: TOC_W_110312B				SeqNo: 2310082		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.168	0.50	10	0	91.7	80-120	9.074	1.03	20	

MS		Sample ID: 1103334-01AZMS				Units: mg/L		Analysis Date: 3/12/2011 06:28 PM		
Client ID:		Run ID: TOC_W_110312B				SeqNo: 2310088		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	26.99	0.50	10	18.1	88.8	80-120	0			E

MS		Sample ID: 1103192-01DMS				Units: mg/L		Analysis Date: 3/12/2011 10:47 PM		
Client ID: QA030411		Run ID: TOC_W_110312B				SeqNo: 2310097		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	17.11	0.50	10	7.632	94.8	80-120	0			

MSD		Sample ID: 1103334-01AZMSD				Units: mg/L		Analysis Date: 3/12/2011 06:57 PM		
Client ID:		Run ID: TOC_W_110312B				SeqNo: 2310089		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	27.84	0.50	10	18.1	97.4	80-120	26.99	3.12	20	E

MSD		Sample ID: 1103192-01DMSD				Units: mg/L		Analysis Date: 3/12/2011 11:16 PM		
Client ID: QA030411		Run ID: TOC_W_110312B				SeqNo: 2310098		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	16.83	0.50	10	7.632	92	80-120	17.11	1.64	20	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
Work Order: 1103192
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106809** Instrument ID **WetChem** Method: **SM2320B**

MBLK		Sample ID: WBLKW1-031411-R106809				Units: mg/L		Analysis Date: 3/14/2011 03:30 PM		
Client ID:		Run ID: WETCHEM_110314I				SeqNo: 2311640		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	U	5.0								

LCS		Sample ID: WLCSW1-031411-R106809				Units: mg/L		Analysis Date: 3/14/2011 03:30 PM		
Client ID:		Run ID: WETCHEM_110314I				SeqNo: 2311641		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	995.3	5.0	1000	0	99.5	80-120	0			

DUP		Sample ID: 1103148-01EDUP				Units: mg/L		Analysis Date: 3/14/2011 03:30 PM		
Client ID:		Run ID: WETCHEM_110314I				SeqNo: 2311644		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	280.7	5.0	0	0	0	0-0	281.7	0.356	20	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Malcolm Pirnie
 Work Order: 1103192
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106823** Instrument ID **UV-2450** Method: **SM4500 S2-F**

MBLK		Sample ID: WBLKW1-031111-R106823				Units: mg/L		Analysis Date: 3/11/2011 08:30 AM			
Client ID:		Run ID: UV-2450_110311B				SeqNo: 2311998		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sulfide	U	1.0									

LCS		Sample ID: WLCSW1-031111-R106823				Units: mg/L		Analysis Date: 3/11/2011 08:30 AM			
Client ID:		Run ID: UV-2450_110311B				SeqNo: 2311999		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sulfide	25.4	1.0	25	0	102	80-120	0				

LCSD		Sample ID: WLCSDW1-031111-R106823				Units: mg/L		Analysis Date: 3/11/2011 08:30 AM			
Client ID:		Run ID: UV-2450_110311B				SeqNo: 2312002		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sulfide	25	1.0	25	0	100	80-120	25.4	1.59	20		

DUP		Sample ID: 1103192-01EDUP				Units: mg/L		Analysis Date: 3/11/2011 08:30 AM			
Client ID: QA030411		Run ID: UV-2450_110311B				SeqNo: 2312001		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sulfide	U	1.0	0	0	0	-0 0	0.2	0	20		

The following samples were analyzed in this batch: 1103192-01E

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

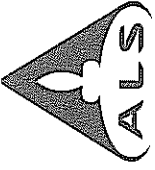
Client: Malcolm Pirnie
Project: El Paso Smelter
WorkOrder: 1103192

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/L	Milligrams per Liter



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 10450 Stancilff Rd., Suite 210
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Chain of Custody Form

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 3352 128th Ave.
 Holland, MI 49424-9263
 Tel: +1 616 399 6070
 Fax: +1 616 399 6185

Page 1 of 1

Customer Information				Project Information				ALS Work Order #: <u>1103112</u> Parameter/Method Request for Analysis											
Purchase Order	Project Name	El Paso Smelter	A	Total Metals (6020/7000) Al, Ca, Mg, Mn, K, Na, Sb, As, Ba, Cd, Cr															
Work Order	Project Number	6835001	B	Co, Cu, Fe, Pb, Mo, Ni, Se, Ti, Zn, Hg															
Company Name	Bill To Company	Malcolm Pirnie	C	Dissolved Metals (6020/7000) Sb, As, Ba, Cd, Cr, Co, Cu, Fe, Pb															
Send Report To	Invoice Attn	Marla Miller	D	Mo, Ni, Se, Ti, Zn, Hg															
Address	Address	211 N Florence Street Suite 202	E	Anions (300) Cl, F, SO4, NO3, NO2															
City/State/Zip	City/State/Zip	El Paso, TX 79901	G	TDS															
Phone	Phone	(95) 533-9025	H	TSS															
Fax	Fax	(95) 533-9045	I	TOC (5310C)															
e-Mail Address	e-Mail Address		J																
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	J	Hold			
1	QA030711	3-4-11	1500	W	2,4,3,7,8	5													
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler(s) Please Print & Sign
 Relinquished by: Brett Ferguson Date: 3-4-11 Time: 1500
 Relinquished by: [Signature] Date: 3-4-11 Time: 1500

Received by: [Signature] Date: 3-5-11 Time: 0910
 Received by (Laboratory): [Signature] Date: 3-5-11 Time: 0910

Preservative Key: 1-HCl, 2-HNO3, 3-H2SO4, 4-NaOH, 5-Na2S2O4, 6-NaHSO4, 7-Other, 8-4°C, 9-5035

QC Package: (Check One Box Below)
 Level II Std QC
 Level III Std QC/RAW Data
 Level IV SW346/CLP
 Other / EIDD

Notes: 10 Day TAT

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

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Sample Receipt Checklist

Client Name: MALCOLM PIRNIE-EL PASO

Date/Time Received: 05-Mar-11 09:10

Work Order: 1103192

Received by: RDH

Checklist completed by R ishel D. Naran 05-Mar-11
eSignature Date

Reviewed by: Bethany Agarwal 07-Mar-11
eSignature Date

Matrices: WATER

Carrier name: FedEx

- Shipping container/cooler in good condition? Yes [checked] No [] Not Present []
Custody seals intact on shipping container/cooler? Yes [checked] No [] Not Present []
Custody seals intact on sample bottles? Yes [] No [] Not Present [checked]
Chain of custody present? Yes [checked] No []
Chain of custody signed when relinquished and received? Yes [checked] No []
Chain of custody agrees with sample labels? Yes [checked] No []
Samples in proper container/bottle? Yes [checked] No []
Sample containers intact? Yes [checked] No []
Sufficient sample volume for indicated test? Yes [checked] No []
All samples received within holding time? Yes [checked] No []
Container/Temp Blank temperature in compliance? Yes [checked] No []

Temperature(s)/Thermometer(s): 1.3 002

Cooler(s)/Kit(s): 9833

Water - VOA vials have zero headspace? Yes [] No [] No VOA vials submitted [checked]

Water - pH acceptable upon receipt? Yes [checked] No [] N/A []

pH adjusted? Yes [] No [checked] N/A []

pH adjusted by: []

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments: []

CorrectiveAction: []

1103192

This portion can be removed for Recipient's records.

3/4/11

FedEx Tracking Number

873521293079

Sender's Name: JODY BILLINGSLEY

Phone: 915 530-9025
433-1761

Company: MALCOM FIRMIE INC

Address: 211 N FLORENCE ST STE 202

Dept./Floor/Suite/Room

EL PASO

State: TX ZIP: 79901-1424

Internal Billing Reference

6835001

1.800.GoFedEx 1.800.463.3339

Service options

or FedEx Day Freight

Indirect Signature
Signature of recipient's address, someone at recipient's address may sign for delivery. For residential deliveries only. Fee applies.

Dry Ice
Dry Ice up to 10 lbs
 Cargo Aircraft Only

Credit Card for Indirect Party
 Credit Card
 Cash/Check

609

Date:
Name:
Company:

CUSTODY SEAL

Date: 3-4-11 Time: 1:00

Name: J. Ferguson

Company: MFE

Seal Broken By:

Date: 3/5/11