



16-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: **1103148**

Dear Marla,

ALS Environmental received 1 sample on 04-Mar-2011 09:15 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 28.

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

Sincerely,

A handwritten signature in black ink that reads "JayLynn F Thibault".

Electronically approved by: Glenda H. Ramos

JayLynn F Thibault
Project Manager



Certificate No: TX: T104704231-10-3

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

DOV#T UR X S#K VD /#F R US##Sdu#r i#k h#D OV#Dde r u d r u |#T ur x s ##D #F dp se h a#E ur k h u r #O p l b g #F r p s d g |

Environmental ALS

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Malcolm Pirnie
Project: El Paso Smelter
Work Order: 1103148

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>
1103148-01	QA030311	Water		3/3/2011 14:55	3/4/2011 09:15	<input type="checkbox"/>

ALS Environmental

Date: 16-Mar-11

Client: Malcolm Pirnie
Project: El Paso Smelter
Work Order: 1103148

Case Narrative

Batch 50676 Metals (sample 1103271-01) MS/MSD unrelated sample.

Batch R106347 Anions (sample 1103148-01) MS/MSD recovery out of control limits. RPD ok.

ALS Environmental

Date: 16-Mar-11

Client: Malcolm Pirnie
 Project: El Paso Smelter
 Sample ID: QA030311
 Collection Date: 3/3/2011 02:55 PM

Work Order: 1103148
 Lab ID: 1103148-01
 Matrix: WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
DISSOLVED MERCURY			Method: SW7470		Prep: SW7470 / 3/8/11		Analyst: JCJ
Mercury	0.000387		0.000042	0.000200	mg/L	1	3/8/2011 19:25
MERCURY			Method: SW7470		Prep: SW7470 / 3/11/11		Analyst: JCJ
Mercury	0.000380		0.000042	0.000200	mg/L	1	3/11/2011 19:19
DISSOLVED METALS			Method: SW6020		Prep: SW3010A / 3/8/11		Analyst: ALR
Antimony		U	0.00050	0.00500	mg/L	1	3/11/2011 19:41
Arsenic	0.190		0.00090	0.00500	mg/L	1	3/11/2011 19:41
Barium	0.0132		0.00070	0.00500	mg/L	1	3/11/2011 19:41
Cadmium	0.000601	J	0.00060	0.00200	mg/L	1	3/11/2011 19:41
Chromium	0.000893	J	0.00060	0.00500	mg/L	1	3/11/2011 19:41
Cobalt	0.00127	J	0.00050	0.00500	mg/L	1	3/11/2011 19:41
Copper		U	0.00050	0.00500	mg/L	1	3/11/2011 19:41
Iron		U	0.036	0.200	mg/L	1	3/11/2011 19:41
Lead		U	0.00040	0.00500	mg/L	1	3/11/2011 19:41
Molybdenum	0.151		0.00060	0.00500	mg/L	1	3/11/2011 19:41
Nickel	0.0119		0.0014	0.00500	mg/L	1	3/11/2011 19:41
Selenium	0.261		0.0025	0.00500	mg/L	1	3/11/2011 19:41
Thallium		U	0.00080	0.00200	mg/L	1	3/11/2011 19:41
Zinc	0.00505		0.0025	0.00500	mg/L	1	3/11/2011 19:41
METALS			Method: SW6020		Prep: SW3010A / 3/9/11		Analyst: ALR
Aluminum	0.00403	J	0.0037	0.0100	mg/L	1	3/9/2011 22:33
Antimony		U	0.00050	0.00500	mg/L	1	3/9/2011 22:33
Arsenic	0.212		0.00090	0.00500	mg/L	1	3/9/2011 22:33
Barium	0.0145		0.00070	0.00500	mg/L	1	3/9/2011 22:33
Cadmium		U	0.00060	0.00200	mg/L	1	3/9/2011 22:33
Calcium	349		2.5	25.0	mg/L	50	3/10/2011 20:53
Chromium	0.000922	J	0.00060	0.00500	mg/L	1	3/9/2011 22:33
Cobalt	0.00160	J	0.00050	0.00500	mg/L	1	3/9/2011 22:33
Copper	0.00178	J	0.00050	0.00500	mg/L	1	3/9/2011 22:33
Iron		U	0.036	0.200	mg/L	1	3/9/2011 22:33
Lead		U	0.00040	0.00500	mg/L	1	3/9/2011 22:33
Magnesium	166		2.0	10.0	mg/L	50	3/10/2011 20:53
Manganese	0.00186	J	0.00080	0.00500	mg/L	1	3/9/2011 22:33
Molybdenum	0.159		0.00060	0.00500	mg/L	1	3/9/2011 22:33
Nickel	0.0133		0.0014	0.00500	mg/L	1	3/9/2011 22:33
Potassium	18.8		0.10	0.200	mg/L	1	3/9/2011 22:33
Selenium	0.278		0.0025	0.00500	mg/L	1	3/9/2011 22:33
Sodium	954		5.0	10.0	mg/L	50	3/10/2011 20:53

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

ALS Environmental

Date: 16-Mar-11

Client: Malcolm Pirnie
 Project: El Paso Smelter
 Sample ID: QA030311
 Collection Date: 3/3/2011 02:55 PM

Work Order: 1103148
 Lab ID: 1103148-01
 Matrix: WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
Thallium		U	0.00080	0.00200	mg/L	1	3/9/2011 22:33
Zinc	0.00357	J	0.0025	0.00500	mg/L	1	3/9/2011 22:33
ANIONS			Method: E300			Analyst: TDW	
Chloride	591		20.0	50.0	mg/L	100	3/5/2011 15:32
Fluoride	0.658		0.0500	0.100	mg/L	1	3/4/2011 18:58
Nitrogen, Nitrate (As N)	68.5	H	3.00	10.0	mg/L	100	3/5/2011 15:32
Nitrogen, Nitrite (As N)		U	3.00	10.0	mg/L	100	3/5/2011 15:32
Sulfate	2,220		50.0	50.0	mg/L	100	3/5/2011 15:32
Nitrate/Nitrite (as N)	1.03		0.0300	0.100	mg/L	1	3/4/2011 18:58
Surr: Selenate (surr)	112			85-115	%REC	1	3/4/2011 18:58
Surr: Selenate (surr)	105			85-115	%REC	100	3/5/2011 15:32
ALKALINITY			Method: SM2320B			Analyst: DM	
Alkalinity, Total (As CaCO3)	282		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	3/8/2011 08:25
TOTAL DISSOLVED SOLIDS			Method: M2540C			Analyst: JKP	
Total Dissolved Solids (Residue, Filterable)	4,920		5.0	10.0	mg/L	1	3/10/2011 11:00
TOTAL ORGANIC CARBON			Method: SM5310C			Analyst: JKP	
Organic Carbon, Total	2.18		0.10	0.500	mg/L	1	3/13/2011 02:38
TOTAL SUSPENDED SOLIDS			Method: M2540D			Analyst: JKP	
Suspended Solids (Residue, Non-Filterable)	9.20		2.00	2.00	mg/L	1	3/9/2011 11:00

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

Work Order: 1103148
 Client: Malcolm Pirnie
 Project: El Paso Smelter

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
<u>Batch ID 50630</u> <u>Test Name: Dissolved Mercury</u>						
1103148-01D	QA030311	Water	3/3/2011 2:55:00 PM		3/8/2011 03:06 PM	3/8/2011 07:25 PM
<u>Batch ID 50634</u> <u>Test Name: Dissolved Metals</u>						
1103148-01D	QA030311	Water	3/3/2011 2:55:00 PM		3/8/2011 04:00 PM	3/11/2011 07:41 PM
<u>Batch ID 50676</u> <u>Test Name: Metals</u>						
1103148-01C	QA030311	Water	3/3/2011 2:55:00 PM		3/9/2011 05:00 PM 3/9/2011 05:00 PM	3/9/2011 10:33 PM 3/10/2011 08:53 PM
<u>Batch ID 50743</u> <u>Test Name: Mercury</u>						
1103148-01C	QA030311	Water	3/3/2011 2:55:00 PM		3/11/2011 12:21 PM	3/11/2011 07:19 PM
<u>Batch ID R106347</u> <u>Test Name: Anions</u>						
1103148-01E	QA030311	Water	3/3/2011 2:55:00 PM			3/4/2011 06:58 PM 3/5/2011 03:32 PM
<u>Batch ID R106478</u> <u>Test Name: Sulfide</u>						
1103148-01B	QA030311	Water	3/3/2011 2:55:00 PM			3/8/2011 08:25 AM
<u>Batch ID R106548</u> <u>Test Name: Total Suspended Solids</u>						
1103148-01E	QA030311	Water	3/3/2011 2:55:00 PM			3/9/2011 11:00 AM
<u>Batch ID R106677</u> <u>Test Name: Total Dissolved Solids</u>						
1103148-01E	QA030311	Water	3/3/2011 2:55:00 PM			3/10/2011 11:00 AM
<u>Batch ID R106735</u> <u>Test Name: Total Organic Carbon</u>						
1103148-01A	QA030311	Water	3/3/2011 2:55:00 PM			3/13/2011 02:38 AM

Work Order: 1103148
Client: Malcolm Pirnie
Project: El Paso Smelter

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID <u>R106809</u> Test Name: <u>Alkalinity</u>						
1103148-01E	QA030311	Water	3/3/2011 2:55:00 PM			3/14/2011 03:30 PM

ALS Environmental

Date: 16-Mar-11

Client: Malcolm Pirnie
 Work Order: 1103148
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50630** Instrument ID **Mercury** Method: **SW7470** (Dissolve)

MBLK	Sample ID: GBLKW4-030811-50630	Units: mg/L	Analysis Date: 3/8/2011 06:48 PM							
Client ID:	Run ID: MERCURY_110308A	SeqNo: 2303942	Prep Date: 3/8/2011	DF: 1						
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.00020								

LCS	Sample ID: GLCSW4-030811-50630	Units: mg/L	Analysis Date: 3/8/2011 06:50 PM							
Client ID:	Run ID: MERCURY_110308A	SeqNo: 2303943	Prep Date: 3/8/2011	DF: 1						
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00558	0.00020	0.005	0	112	80-120	0			

MS	Sample ID: 1102823-13DMS	Units: mg/L	Analysis Date: 3/8/2011 06:56 PM							
Client ID:	Run ID: MERCURY_110308A	SeqNo: 2303948	Prep Date: 3/8/2011	DF: 1						
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00543	0.00020	0.005	-0.000002	109	80-120	0			

MSD	Sample ID: 1102823-13DMSD	Units: mg/L	Analysis Date: 3/8/2011 06:58 PM							
Client ID:	Run ID: MERCURY_110308A	SeqNo: 2303950	Prep Date: 3/8/2011	DF: 1						
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00546	0.00020	0.005	-0.000002	109	80-120	0.00543	0.551	20	

DUP	Sample ID: 1102823-13DDUP	Units: mg/L	Analysis Date: 3/8/2011 06:54 PM							
Client ID:	Run ID: MERCURY_110308A	SeqNo: 2303947	Prep Date: 3/8/2011	DF: 1						
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.00020	0	0	0	-0 0	-0.000002	0	20	

The following samples were analyzed in this batch: 1103148-01D

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

Client: Malcolm Pirnie
Work Order: 1103148
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50634** Instrument ID **ICPMS03** Method: **SW6020** (**Dissolve**)

MBLK Sample ID: **MBLKW4-030811-50634** Units: **mg/L** Analysis Date: **3/11/2011 02:47 AM**

Client ID: Run ID: **ICPMS03_110310A** SeqNo: **2308332** Prep Date: **3/8/2011** 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	0.0007275	0.0050								J
Cadmium	0.0006977	0.0020								J
Chromium	U	0.0050								
Cobalt	U	0.0050								
Copper	0.0009672	0.0050								J
Iron	U	0.20								
Lead	0.001022	0.0050								J
Molybdenum	0.001287	0.0050								J
Nickel	U	0.0050								
Selenium	U	0.0050								
Thallium	U	0.0020								
Zinc	0.003452	0.0050								J

LCS Sample ID: **MLCSW4-030811-50634** Units: **mg/L** Analysis Date: **3/11/2011 02:52 AM**

Client ID: Run ID: **ICPMS03_110310A** SeqNo: **2308333** Prep Date: **3/8/2011** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.04306	0.0050	0.05	0	86.1	80-120	0			
Arsenic	0.04464	0.0050	0.05	0	89.3	80-120	0			
Barium	0.04354	0.0050	0.05	0	87.1	80-120	0			
Cadmium	0.04327	0.0020	0.05	0	86.5	80-120	0			
Chromium	0.04484	0.0050	0.05	0	89.7	80-120	0			
Cobalt	0.04444	0.0050	0.05	0	88.9	80-120	0			
Copper	0.04537	0.0050	0.05	0	90.7	80-120	0			
Iron	4.455	0.20	5	0	89.1	80-120	0			
Lead	0.0434	0.0050	0.05	0	86.8	80-120	0			
Molybdenum	0.04236	0.0050	0.05	0	84.7	80-120	0			
Nickel	0.04579	0.0050	0.05	0	91.6	80-120	0			
Selenium	0.04319	0.0050	0.05	0	86.4	80-120	0			
Thallium	0.04425	0.0020	0.05	0	88.5	80-120	0			
Zinc	0.04744	0.0050	0.05	0	94.9	80-120	0			

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

Client: Malcolm Pirnie
Work Order: 1103148
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50634** Instrument ID **ICPMS03** Method: **SW6020** **(Dissolve)**

MS		Sample ID: 1102823-12DMS				Units: mg/L		Analysis Date: 3/11/2011 03:13 AM		
Client ID:		Run ID: ICPMS03_110310A				SeqNo: 2308337		Prep Date: 3/8/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.04415	0.0050	0.05	0.0002211	87.9	75-125	0			
Arsenic	0.04595	0.0050	0.05	0.00007375	91.8	75-125	0			
Barium	0.04446	0.0050	0.05	0.0007467	87.4	75-125	0			
Cadmium	0.04389	0.0020	0.05	0.0006875	86.4	75-125	0			
Chromium	0.04534	0.0050	0.05	0.0001091	90.5	75-125	0			
Cobalt	0.0454	0.0050	0.05	-0.0001313	91.1	75-125	0			
Copper	0.04552	0.0050	0.05	-0.0001333	91.3	75-125	0			
Iron	4.525	0.20	5	-0.02712	91	75-125	0			
Lead	0.04431	0.0050	0.05	0.0009389	86.7	75-125	0			
Molybdenum	0.04263	0.0050	0.05	0.001217	82.8	75-125	0			
Nickel	0.04585	0.0050	0.05	-0.0004675	92.6	75-125	0			
Selenium	0.04464	0.0050	0.05	-0.0002918	89.9	75-125	0			
Thallium	0.04578	0.0020	0.05	0.0003204	90.9	75-125	0			
Zinc	0.04781	0.0050	0.05	0.005136	85.3	75-125	0			

MSD		Sample ID: 1102823-12DMSD				Units: mg/L		Analysis Date: 3/11/2011 03:18 AM		
Client ID:		Run ID: ICPMS03_110310A				SeqNo: 2308338		Prep Date: 3/8/2011		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.04465	0.0050	0.05	0.0002211	88.9	75-125	0.04415	1.13	25	
Arsenic	0.04509	0.0050	0.05	0.00007375	90	75-125	0.04595	1.89	25	
Barium	0.04417	0.0050	0.05	0.0007467	86.8	75-125	0.04446	0.654	25	
Cadmium	0.04443	0.0020	0.05	0.0006875	87.5	75-125	0.04389	1.22	25	
Chromium	0.04574	0.0050	0.05	0.0001091	91.3	75-125	0.04534	0.878	25	
Cobalt	0.04594	0.0050	0.05	-0.0001313	92.1	75-125	0.0454	1.18	25	
Copper	0.04582	0.0050	0.05	-0.0001333	91.9	75-125	0.04552	0.657	25	
Iron	4.537	0.20	5	-0.02712	91.3	75-125	4.525	0.265	25	
Lead	0.04371	0.0050	0.05	0.0009389	85.5	75-125	0.04431	1.36	25	
Molybdenum	0.04342	0.0050	0.05	0.001217	84.4	75-125	0.04263	1.84	25	
Nickel	0.04647	0.0050	0.05	-0.0004675	93.9	75-125	0.04585	1.34	25	
Selenium	0.04471	0.0050	0.05	-0.0002918	90	75-125	0.04464	0.157	25	
Thallium	0.04577	0.0020	0.05	0.0003204	90.9	75-125	0.04578	0.0218	25	
Zinc	0.04768	0.0050	0.05	0.005136	85.1	75-125	0.04781	0.272	25	

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

Client: Malcolm Pirnie
Work Order: 1103148
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50634** Instrument ID **ICPMS03** Method: **SW6020** (**Dissolve**)

DUP Sample ID: **1102823-12DDUP** Units: **mg/L** Analysis Date: **3/11/2011 03:02 AM**

Client ID: Run ID: **ICPMS03_110310A** SeqNo: **2308335** Prep Date: **3/8/2011** DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.0050	0	0	0	-0 0	0.0002211	0	25	
Arsenic	U	0.0050	0	0	0	-0 0	0.00007375	0	25	
Barium	0.0007089	0.0050	0	0	0	-0 0	0.0007467	0	25	J
Cadmium	0.0006536	0.0020	0	0	0	-0 0	0.0006875	0	25	J
Chromium	U	0.0050	0	0	0	-0 0	0.0001091	0	25	
Cobalt	U	0.0050	0	0	0	-0 0	-0.0001313	0	25	
Copper	U	0.0050	0	0	0	-0 0	-0.0001333	0	25	
Iron	U	0.20	0	0	0	-0 0	-0.02712	0	25	
Lead	0.0008955	0.0050	0	0	0	-0 0	0.0009389	0	25	J
Molybdenum	0.001134	0.0050	0	0	0	-0 0	0.001217	0	25	J
Nickel	U	0.0050	0	0	0	-0 0	-0.0004675	0	25	
Selenium	U	0.0050	0	0	0	-0 0	-0.0002918	0	25	
Thallium	U	0.0020	0	0	0	-0 0	0.0003204	0	25	
Zinc	U	0.0050	0	0	0	-0 0	0.005136	0	25	

The following samples were analyzed in this batch:

1103148-01D

Client: Malcolm Pirnie
Work Order: 1103148
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50676** Instrument ID **ICPMS03** Method: **SW6020**

MBLK		Sample ID: MBLKW5-030911-50676			Units: mg/L		Analysis Date: 3/9/2011 08:01 PM			
Client ID:		Run ID: ICPMS03_110309A			SeqNo: 2305814		Prep Date: 3/9/2011		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.006885	0.010								J
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	U	0.0050								

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

Client: Malcolm Pirnie
 Work Order: 1103148
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50676** Instrument ID **ICPMS03** Method: **SW6020**

LCS Sample ID: **MLCSW5-030911-50676** Units: **mg/L** Analysis Date: **3/9/2011 08:07 PM**

Client ID: Run ID: **ICPMS03_110309A** SeqNo: **2305815** Prep Date: **3/9/2011** DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1026	0.010	0.1	0	103	80-120	0			
Arsenic	0.04952	0.0050	0.05	0	99	80-120	0			
Barium	0.04789	0.0050	0.05	0	95.8	80-120	0			
Cadmium	0.04857	0.0020	0.05	0	97.1	80-120	0			
Calcium	4.933	0.50	5	0	98.7	80-120	0			
Chromium	0.04878	0.0050	0.05	0	97.6	80-120	0			
Cobalt	0.05026	0.0050	0.05	0	101	80-120	0			
Copper	0.05093	0.0050	0.05	0	102	80-120	0			
Iron	4.896	0.20	5	0	97.9	80-120	0			
Lead	0.04917	0.0050	0.05	0	98.3	80-120	0			
Magnesium	4.807	0.20	5	0	96.1	80-120	0			
Manganese	0.04876	0.0050	0.05	0	97.5	80-120	0			
Molybdenum	0.04779	0.0050	0.05	0	95.6	80-120	0			
Nickel	0.05011	0.0050	0.05	0	100	80-120	0			
Potassium	4.811	0.20	5	0	96.2	80-120	0			
Selenium	0.04733	0.0050	0.05	0	94.7	80-120	0			
Sodium	4.802	0.20	5	0	96	80-120	0			
Thallium	0.04675	0.0020	0.05	0	93.5	80-120	0			
Zinc	0.05105	0.0050	0.05	0	102	80-120	0			

LCS Sample ID: **MLCSW5-030911-50676** Units: **mg/L** Analysis Date: **3/10/2011 08:01 PM**

Client ID: Run ID: **ICPMS03_110310A** SeqNo: **2307924** Prep Date: **3/9/2011** DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.04665	0.0050	0.05	0	93.3	80-120	0			

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

Client: Malcolm Pirnie
 Work Order: 1103148
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50676** Instrument ID **ICPMS03** Method: **SW6020**

MS Sample ID: **1103271-01CMS** Units: **mg/L** Analysis Date: **3/9/2011 08:28 PM**

Client ID: Run ID: **ICPMS03_110309A** SeqNo: **2305819** Prep Date: **3/9/2011** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1507	0.010	0.1	0.03214	119	80-120	0			
Arsenic	0.04949	0.0050	0.05	0.001042	96.9	80-120	0			
Barium	0.1524	0.0050	0.05	0.09691	111	80-120	0			
Cadmium	0.04978	0.0020	0.05	-0.0006342	101	80-120	0			
Calcium	100.6	0.50	5	98.88	34.4	80-120	0			SO
Chromium	0.04715	0.0050	0.05	0.001173	92	80-120	0			
Cobalt	0.04729	0.0050	0.05	0.0002033	94.2	80-120	0			
Copper	0.04684	0.0050	0.05	-0.0000747	93.8	80-120	0			
Iron	4.743	0.20	5	0.1675	91.5	80-120	0			
Lead	0.05096	0.0050	0.05	-0.0002498	102	80-120	0			
Magnesium	24.85	0.20	5	19.29	111	80-120	0			
Manganese	0.07132	0.0050	0.05	0.02636	89.9	80-120	0			
Molybdenum	0.05177	0.0050	0.05	0.000416	103	80-120	0			
Nickel	0.04822	0.0050	0.05	0.001715	93	80-120	0			
Potassium	7.135	0.20	5	2.051	102	80-120	0			
Selenium	0.04659	0.0050	0.05	-0.0006026	94.4	80-120	0			
Sodium	126.6	0.20	5	116.9	194	80-120	0			SO
Thallium	0.04824	0.0020	0.05	0.0004334	95.6	80-120	0			
Zinc	0.04842	0.0050	0.05	0.0006817	95.5	80-120	0			

MS Sample ID: **1103271-01CMS** Units: **mg/L** Analysis Date: **3/10/2011 08:06 PM**

Client ID: Run ID: **ICPMS03_110310A** SeqNo: **2307925** Prep Date: **3/9/2011** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.0481	0.0050	0.05	0	96.2	80-120	0			

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

Client: Malcolm Pirnie
Work Order: 1103148
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50676** Instrument ID **ICPMS03** Method: **SW6020**

MSD		Sample ID: 1103271-01CMSD			Units: mg/L			Analysis Date: 3/9/2011 08:33 PM		
Client ID:		Run ID: ICPMS03_110309A			SeqNo: 2305820		Prep Date: 3/9/2011		DF: 1	
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.138	0.010	0.1	0.03214	106	80-120	0.1507	8.8	15	
Arsenic	0.05296	0.0050	0.05	0.001042	104	80-120	0.04949	6.77	15	
Barium	0.1458	0.0050	0.05	0.09691	97.8	80-120	0.1524	4.43	15	
Cadmium	0.04843	0.0020	0.05	-0.0006342	98.1	80-120	0.04978	2.75	15	
Calcium	98.99	0.50	5	98.88	2.2	80-120	100.6	1.61	15	SO
Chromium	0.0497	0.0050	0.05	0.001173	97.1	80-120	0.04715	5.27	15	
Cobalt	0.04941	0.0050	0.05	0.0002033	98.4	80-120	0.04729	4.38	15	
Copper	0.04894	0.0050	0.05	-0.0000747	98	80-120	0.04684	4.39	15	
Iron	5.04	0.20	5	0.1675	97.4	80-120	4.743	6.07	15	
Lead	0.05005	0.0050	0.05	-0.0002498	101	80-120	0.05096	1.8	15	
Magnesium	23.13	0.20	5	19.29	76.8	80-120	24.85	7.17	15	S
Manganese	0.07243	0.0050	0.05	0.02636	92.1	80-120	0.07132	1.54	15	
Molybdenum	0.05169	0.0050	0.05	0.000416	103	80-120	0.05177	0.155	15	
Nickel	0.04981	0.0050	0.05	0.001715	96.2	80-120	0.04822	3.24	15	
Potassium	6.907	0.20	5	2.051	97.1	80-120	7.135	3.25	15	
Selenium	0.0483	0.0050	0.05	-0.0006026	97.8	80-120	0.04659	3.6	15	
Sodium	118	0.20	5	116.9	22	80-120	126.6	7.03	15	SO
Thallium	0.04779	0.0020	0.05	0.0004334	94.7	80-120	0.04824	0.937	15	
Zinc	0.05044	0.0050	0.05	0.0006817	99.5	80-120	0.04842	4.09	15	

MSD		Sample ID: 1103271-01CMSD			Units: mg/L			Analysis Date: 3/10/2011 08:11 PM		
Client ID:		Run ID: ICPMS03_110310A			SeqNo: 2307926		Prep Date: 3/9/2011		DF: 1	
Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.0507	0.0050	0.05	0	101	80-120	0.0481	5.26	15	

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

Client: Malcolm Pirnie
 Work Order: 1103148
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50676** Instrument ID **ICPMS03** Method: **SW6020**

DUP Sample ID: **1103271-01CDUP** Units: **mg/L** Analysis Date: **3/9/2011 08:17 PM**

Client ID: Run ID: **ICPMS03_110309A** SeqNo: **2305817** Prep Date: **3/9/2011** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.02885	0.010	0	0	0	-0 0	0.03214	10.8	25	
Antimony	U	0.0050	0	0	0	-0 0	0.0002353	0	25	
Arsenic	0.001135	0.0050	0	0	0	-0 0	0.001042	0	25	J
Barium	0.09333	0.0050	0	0	0	-0 0	0.09691	3.76	25	
Cadmium	U	0.0020	0	0	0	-0 0	-0.0006342	0	25	
Calcium	94.66	0.50	0	0	0	-0 0	98.88	4.36	25	
Chromium	U	0.0050	0	0	0	-0 0	0.001173	0	25	
Cobalt	U	0.0050	0	0	0	-0 0	0.0002033	0	25	
Copper	U	0.0050	0	0	0	-0 0	-0.0000747	0	25	
Iron	0.04851	0.20	0	0	0	-0 0	0.1675	0	25	J
Lead	U	0.0050	0	0	0	-0 0	-0.0002498	0	25	
Magnesium	18.76	0.20	0	0	0	-0 0	19.29	2.79	25	
Manganese	0.02412	0.0050	0	0	0	-0 0	0.02636	8.87	25	
Molybdenum	U	0.0050	0	0	0	-0 0	0.000416	0	25	
Nickel	U	0.0050	0	0	0	-0 0	0.001715	0	25	
Potassium	1.985	0.20	0	0	0	-0 0	2.051	3.27	25	
Selenium	U	0.0050	0	0	0	-0 0	-0.0006026	0	25	
Sodium	114.9	0.20	0	0	0	-0 0	116.9	1.73	25	
Thallium	U	0.0020	0	0	0	-0 0	0.0004334	0	25	
Zinc	U	0.0050	0	0	0	-0 0	0.0006817	0	25	

The following samples were analyzed in this batch:

1103148-01C

Client: Malcolm Pirnie
 Work Order: 1103148
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **50743** Instrument ID **Mercury** Method: **SW7470**

MBLK	Sample ID: GBLKW4-031111-50743						Units: mg/L	Analysis Date: 3/11/2011 06:58 PM			
Client ID:		Run ID: MERCURY_110311A				SeqNo: 2309674	Prep Date: 3/11/2011	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: GLCSW4-031111-50743						Units: mg/L	Analysis Date: 3/11/2011 07:00 PM			
Client ID:		Run ID: MERCURY_110311A				SeqNo: 2309675	Prep Date: 3/11/2011	DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.00464	0.00020	0.005	0	92.8	85-115	0				

MS	Sample ID: 1103186-01DMS						Units: mg/L	Analysis Date: 3/11/2011 07:06 PM			
Client ID:		Run ID: MERCURY_110311A				SeqNo: 2309678	Prep Date: 3/11/2011	DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.0047	0.00020	0.005	0.000032	93.4	85-115	0				

MSD	Sample ID: 1103186-01DMSD						Units: mg/L	Analysis Date: 3/11/2011 07:09 PM			
Client ID:		Run ID: MERCURY_110311A				SeqNo: 2309679	Prep Date: 3/11/2011	DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.00458	0.00020	0.005	0.000032	91	85-115	0.0047	2.59	20		

DUP	Sample ID: 1103186-01DDUP						Units: mg/L	Analysis Date: 3/11/2011 07:04 PM			
Client ID:		Run ID: MERCURY_110311A				SeqNo: 2309677	Prep Date: 3/11/2011	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	0.000032	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: 1103148
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106347** Instrument ID **ICS3000** Method: **E300**

MBLK Sample ID: **WBLKW1-030411-R106347** Units: **mg/L** Analysis Date: **3/4/2011 05:55 PM**

Client ID: Run ID: **ICS3000_110304A** SeqNo: **2300625** 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								
Surr: Selenate (surr)	5.246	0.10	5	0	105	85-115	0			

LCS Sample ID: **WLC SW1-030411-R106347** Units: **mg/L** Analysis Date: **3/4/2011 06:16 PM**

Client ID: Run ID: **ICS3000_110304A** SeqNo: **2300628** 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	0			
Fluoride	3.931	0.10	4	0	98.3	90-110	0			
Nitrogen, Nitrate (As N)	3.909	0.10	4	0	97.7	90-110	0			
Nitrogen, Nitrite (As N)	3.974	0.10	4	0	99.4	90-110	0			
Sulfate	19.47	0.50	20	0	97.4	90-110	0			
Nitrate/Nitrite (as N)	7.883	0.10	8	0	98.5	90-110	0			
Surr: Selenate (surr)	5.238	0.10	5	0	105	85-115	0			

LCSD Sample ID: **WLCSDW1-030411-R106347** Units: **mg/L** Analysis Date: **3/4/2011 06:37 PM**

Client ID: Run ID: **ICS3000_110304A** SeqNo: **2300630** 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	0	20	
Fluoride	3.955	0.10	4	0	98.9	90-110	0	0	20	
Nitrogen, Nitrate (As N)	3.927	0.10	4	0	98.2	90-110	0	0	20	
Nitrogen, Nitrite (As N)	3.994	0.10	4	0	99.8	90-110	0	0	20	
Sulfate	19.61	0.50	20	0	98	90-110	0	0	20	
Nitrate/Nitrite (as N)	7.921	0.10	8	0	99	90-110	0	0	20	
Surr: Selenate (surr)	5.275	0.10	5	0	106	85-115	0	0	20	

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

Client: Malcolm Pirnie
Work Order: 1103148
Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106347** Instrument ID **ICS3000** Method: **E300**

MS Sample ID: **1103148-01EMS** Units: **mg/L** Analysis Date: **3/4/2011 07:19 PM**

Client ID: **QA030311** Run ID: **ICS3000_110304A** SeqNo: **2300632** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	541.5	0.50	10	544.5	-30.5	80-120	0			SEO
Fluoride	2.264	0.10	2	0.347	95.8	80-120	0			
Nitrogen, Nitrite (As N)	1.985	0.10	2	0	99.2	80-120	0			
Sulfate	2749	0.50	10	2642	1070	80-120	0			SEO
Nitrate/Nitrite (as N)	1.985	0.10	4	80.61	-1970	80-120	0			SO
<i>Surr: Selenate (surr)</i>	<i>4.96</i>	<i>0.10</i>	<i>5</i>	<i>0</i>	<i>99.2</i>	<i>85-115</i>	<i>0</i>			

MSD Sample ID: **1103148-01EMSD** Units: **mg/L** Analysis Date: **3/4/2011 07:40 PM**

Client ID: **QA030311** Run ID: **ICS3000_110304A** SeqNo: **2300633** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	539.2	0.50	10	544.5	-53	80-120	541.5	0.417	20	SEO
Fluoride	2.236	0.10	2	0.347	94.4	80-120	2.264	1.24	20	
Sulfate	2738	0.50	10	2642	954	80-120	2749	0.421	20	SEO
<i>Surr: Selenate (surr)</i>	<i>4.949</i>	<i>0.10</i>	<i>5</i>	<i>0</i>	<i>99</i>	<i>85-115</i>	<i>4.96</i>	<i>0.222</i>	<i>20</i>	

The following samples were analyzed in this batch:

1103148-01E

Client: Malcolm Pirnie
 Work Order: 1103148
 Project: El Paso Smelter

QC BATCH REPORT

Batch ID: **R106478** Instrument ID **WetChem** Method: **SM4500 S2-F**

MBLK	Sample ID: WBLKW-030811-R106478	Units: mg/L					Analysis Date: 3/8/2011 08:25 AM			
Client ID:	Run ID: WETCHEM_110308H	SeqNo: 2303608			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: WLCSW-030811-R106478	Units: mg/L					Analysis Date: 3/8/2011 08:25 AM			
Client ID:	Run ID: WETCHEM_110308H	SeqNo: 2303609			Prep Date:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	24.8	1.0	25	0	99.2	80-120	0			

LCSD	Sample ID: WLCSDW-030811-R106478	Units: mg/L					Analysis Date: 3/8/2011 08:25 AM			
Client ID:	Run ID: WETCHEM_110308H	SeqNo: 2303619			Prep Date:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	24.4	1.0	25	0	97.6	80-120	24.8	1.63	20	

MS	Sample ID: 1103163-01IMS	Units: mg/L					Analysis Date: 3/8/2011 08:25 AM			
Client ID:	Run ID: WETCHEM_110308H	SeqNo: 2303618			Prep Date:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	24	1.0	25	0	96	80-120	0			

DUP	Sample ID: 1103162-01IDUP	Units: mg/L					Analysis Date: 3/8/2011 08:25 AM			
Client ID:	Run ID: WETCHEM_110308H	SeqNo: 2303617			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	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: 1103148
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:

1103148-01E

Client: Malcolm Pirnie
Work Order: 1103148
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: QA030311		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: 1103148
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:		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:		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: 1103148-01A

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

Client: Malcolm Pirnie
Work Order: 1103148
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	ML	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	ML	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: QA030311		Run ID: WETCHEM_110314I				SeqNo: 2311644		Prep Date:		DF: 1
Analyte	Result	ML	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: 1103148-01E

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

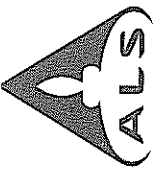
Client: Malcolm Pirnie
Project: El Paso Smelter
WorkOrder: 1103148

**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

ALS Laboratory Group
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 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>1103148</u>											
Purchase Order				Project Name				Parameter/Method Request for Analysis											
Work Order				Project Number				Total Metals (6020/7000) Al, Ca, Mg, Mn, K, Na, Sb, As, Ba, Cd, Cr											
Company Name				Bill To Company				Co, Cu, Fe, Pb, Mo, Ni, Se, Ti, Zn, Hg											
Send Report To				Invoice Attn				Dissolved Metals (6020/7000) Sb, As, Ba, Cd, Cr, Co, Cu, Fe, Pb											
Address				Address				Mo, Ni, Se, Ti, Zn, Hg											
City/State/Zip				City/State/Zip				Anions (300) Cl, F, SO4, NO3, NO2											
Phone				Phone				TDS											
Fax				Fax				TSS											
e-Mail Address				e-Mail Address				TOC (5310C)											
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	QA0303U	03-03-11	1455	W		2, 4, 5	X	X	X	X	X	X	X	X					
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler(s) Please Print & Sign: Carroll Ferguson Shipment Method: FedEx Received by: [Signature] Required Turnaround Time: (Check Box) Std 10 WK Days 5 WK Days 2 WK Days 24 Hour

Relinquished by: [Signature] Date: 3-3-11 Time: 1700 Received by (Laboratory): [Signature] Date: 03-11 Time: 0915 Notes: 10 Day TAT

Relinquished by: [Signature] Date: 3-3-11 Time: 1700 Received by (Laboratory): [Signature] Date: 03-11 Time: 0915 Cooler ID: 3-4-11 Cooler Temp: 8-4°C

Logged by (Laboratory): [Signature] Date: 3-3-11 Time: 1700 Checked by (Laboratory): [Signature] Date: 03-11 Time: 0915 Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 9-5035

QC Package: (Check One Box Below) Level II Std QC Level III Std QC/RAW Data Level IV SWB45/CLP Other / EDDP

Results Due Date: _____

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: 04-Mar-11 09:15

Work Order: 1103148

Received by: PMG

Checklist completed by Salvador A. Yanez 04-Mar-11
eSignature Date

Reviewed by: Jay Lynn F Thibault 04-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): 3.1c 002

Cooler(s)/Kit(s): 3217

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

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

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

pH adjusted by: []

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments: []

CorrectiveAction: []

1103148



ALS Environmental

10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

3217

CUSTODY SEAL

Date: 3/3/11 Time: 1500
Name: Carol Kay
Company: MFE

Seal Broken By:

3/4/11

This portion can be removed for Recipient's records.
FedEx Tracking Number

3-3-11

873521293068

Order's Name JUDY BILLINGS-LEA

Phone 915 500-9025

Company MALCOM PARNIS INC

Address 211 N FLORENCE ST STE 204

Dept/Floor/Suite/Room

EL PASO

State TX ZIP 79901-1424

or Internal Billing Reference

6835001